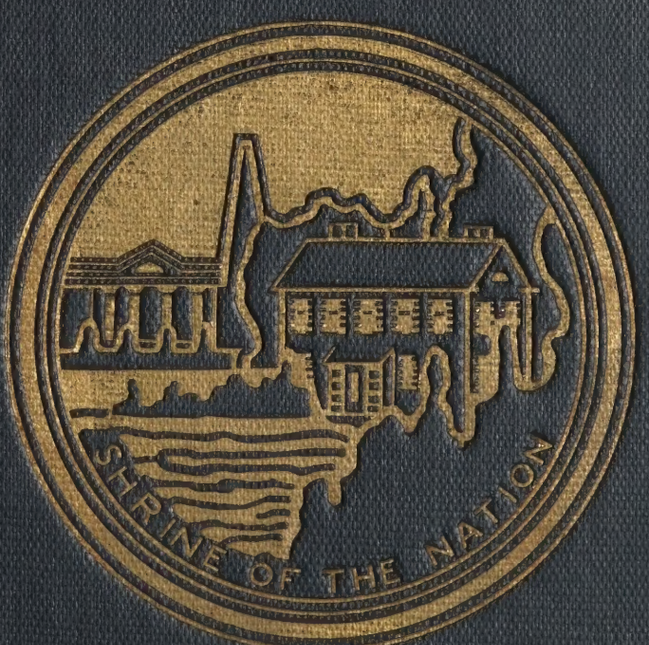
SPRINGFIELD

CAPITAL of ILLINOIS

OFFICIAL CITY PLAN



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CITY PLAN

of the city of

Springfield, Illinois

As prepared by MYRON HOWARD WEST and staff of the American Park Builders, under the direction and approval of the Springfield Zoning and Plan Commission.

Adopted by the City Council of the city of Springfield, and made Official City Plan, 1924.

Published by order of the City Council

1925

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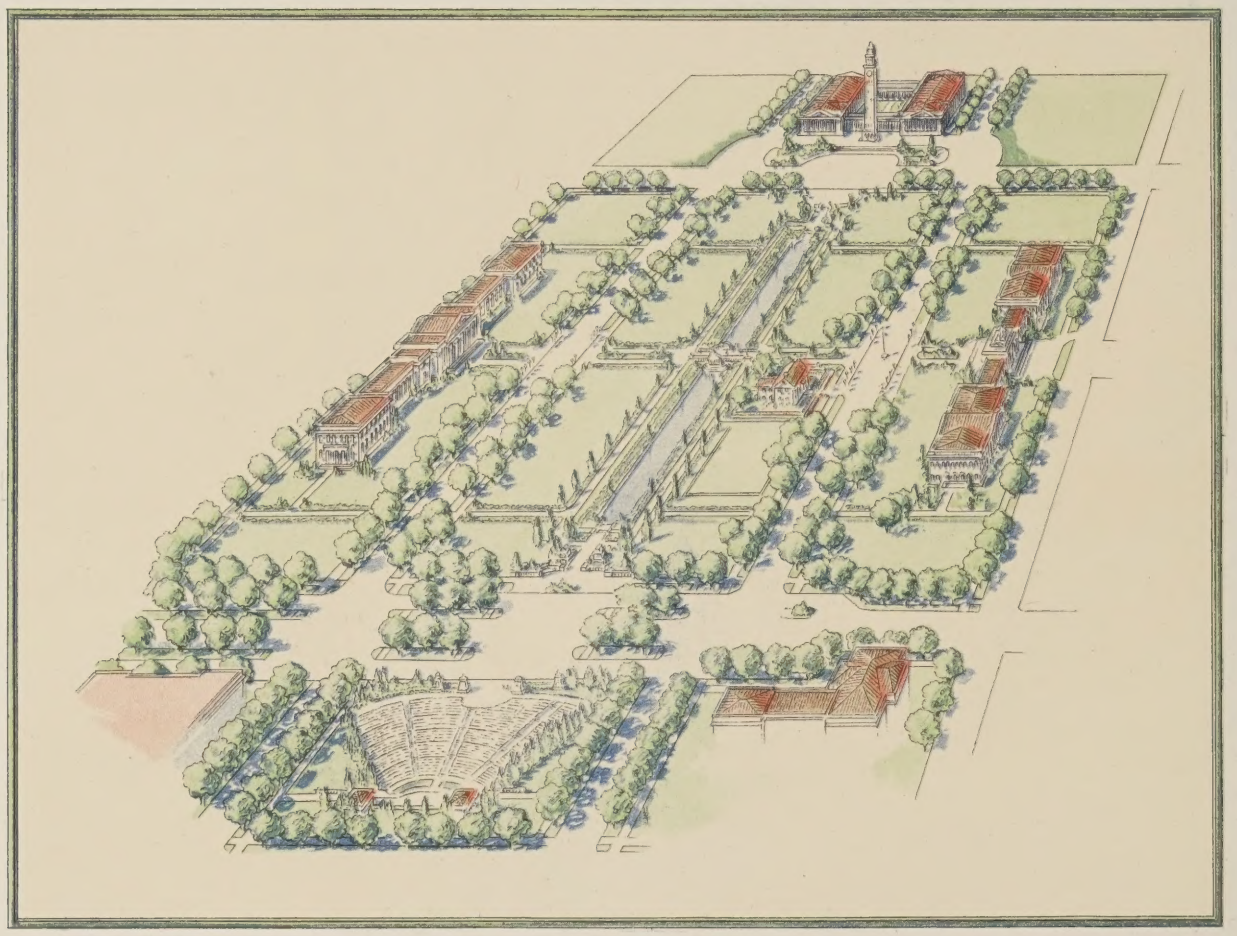

CHART 32—*Bird's-eye view of proposed Municipal Group and the Lincoln Home*

LETTER OF TRANSMITTAL

May 31, 1923

A. L. Bowen, *Chairman*,
ZONING AND PLAN COMMISSION,
SPRINGFIELD, ILLINOIS.

Dear Sir:—

Herewith is submitted a report with various recommendations accompanied by drawings, comprising what may be termed "A program for the improvement and extension of Springfield".

This work represents long and painstaking effort on the part of our staff and much time and constructive criticism on the part of the members of your Commission.

I can state with satisfaction that during all the months we have been engaged in this inspiring task, no suggestions have come to us from the citizens of Springfield which have expressed other than the desire to help all the people of Springfield in the greatest measure. The common thought of all with whom we have come into contact has been for a greater, better development of community life, without sectional or partisan favoritism. Such a sentiment by its leaders augurs well for a city's real greatness.

The Springfield Plan will prove a rare investment if followed consistently and with discriminating wisdom. Changing conditions may necessitate modifying its detail, but not its policy. Its application should not be hurried beyond reason. The right thing should be done at the right time and the greater perspective afforded by the plan will make this possible.

Respectfully submitted,

Myron Howard West

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LINCOLN IN SPRINGFIELD

A FOREWORD BY THE PLAN COMMISSION

> "No one not in my situation can appreciate my feeling of sadness at this parting. To this place and the kindness of these people I owe everything. Here I have lived a quarter of a century, and have passed from a young to an old man. Here my children have been born, and one is buried. I now leave not knowing when or whether ever I may return, with a task before me greater than that which rested upon Washington. Without the assistance of that Divine Being who ever attended him, I cannot succeed. With that assistance, I cannot fail. Trusting in Him, who can go with me and remain with you and be everywhere for good, let us confidently hope that all will yet be well. To His care commending you, as I hope in your prayers you will commend me, I bid you an affectionate farewell."

SO spoke Lincoln to his fellow-townsmen who had gathered at the depot to bid him godspeed on his journey to Washington to become the nation's chief in the time of its greatest trial.

His doubt at parting, Destiny made substance—he never in life returned. On his tragic death a cabinet member, who had been watching at his side, said what all the world has since said, "Now he belongs to the Ages."

Lincoln's body was brought home for burial.

Although four years earlier he had spoken of himself as an "old man", yet he was but fifty-six when he died. Most of his associates living in Springfield survived him many years. They were not much given to public praise of their departed friend. He had not been to them a superman but one of them—an able leader whom they genuinely liked and respected. His stories they could not forget—matchless stories full of homely humor and good sense, and to the point.

These friends of his—each in his time has answered the summons. Their sons for the most part have followed. This is the generation of their grandsons; in them repose the home traditions of Lincoln.

Of this heritage and some of its obligations and privileges we wish presently to speak. Just here we wish to recall that, with us, Lincoln lives in two ways: first, as we have said, through home traditions as might an illustrious ancestor; and second, as a world hero, of whom we are reminded constantly by those most welcome visitors coming to his shrine. Whatever may have been our understanding of Lincoln through home tradition, there can be no misunderstanding of the world's opinion. With the passing of time his great humanity more and more stirs the pulse of all mankind. To his home and resting place are coming his countrymen from every part of the Union which he saved; from the whole world, come rulers of states, historians, students and patriots. The humble from oppressed lands come here to live, as in his presence.

We are beginning to understand that, as Mt. Vernon must be prepared to welcome the world which would do homage to the memory of Washington, so must we in Springfield be prepared to welcome through all time the pilgrims, in increasing hosts, seeking communion with the spirit of Lincoln. And we must offer all we can that is authentic and true, to satisfy their quest.

Some of our priceless possession are assured to posterity; others, may be lost if heed is not taken; and all can be made much more effective. It is useless to mourn the loss of letters, documents and effects of Mr. Lincoln's, now gone beyond recovery, unless it will stir us to be more provident for the future. Those forebears of ours of whom we have spoken, having a store of memories of Lincoln himself, did not seem to attach great importance to the places and things associated with his life. In some degree this feeling has come down to us. We see the mistake. We know the desire that people have for contact with the Lincoln tradition and for all tangible evidences of his way of life.

Foremost of the memorials is Lincoln's tomb, commonly called the "Lincoln Monument", where he rests, and with him, all his family except his eldest son, who is living. It is situated in Oak Ridge Cemetery, where also rest most of his old-time friends. The site is good. The edifice is dignified but not pretentious, and is not unworthy of its office. The tomb is reached by random and indifferent roads—which is disappointing.

Courtesy Houghton Mifflin Co.

The Lincoln Home

Five blocks from the center of the city stands the house which his neighbors used to speak of as "Mr. Lincoln's home"— the home he bought two years after his marriage, in which he lived until called to the presidency, and the only one he ever owned. It is so near the commercial district that it has been crowded upon by buildings of various kinds. If left to its fate, Mr. Lincoln's home would eventually be smothered. As a measure of fire protection the state has recently bought the adjoining lot and removed the nearest building. This serves as a beginning, but it is not enough. The site is adrift in the city—which is wrong.

Of great historical interest is the old state capitol, now the county courthouse, situated in the public square, where it has been the focus of the city's life for more than three-quarters of a century. Its cornerstone was laid in 1837, following the removal of the capitol from Vandalia. Lincoln, who was then in the legislature, took a leading part in obtaining the capitol for Springfield. For twenty

years thereafter his was a familiar and impressive figure in this building in many roles,—as a member of the legislature, as lawyer at the bar of the Supreme Court, and as a defender of human rights delivering imperishable speeches against the extension of slavery. In 1854 in representatives' hall he answered Senator Douglas, author and defender of the Kansas-Nebraska bill—a speech which carried the circuit lawyer back into the political arena and made him state leader of the opposing opinion. A tablet marks the room in which Lincoln four years later delivered his famous "house divided against itself" speech. This speech followed his nomination for United States Senator against Douglas and preceded the remarkable series of debates which gave him national fame. In this building Lincoln, as president-elect, had his reception room. And finally, here his body rested in state before burial. As to the building itself, those competent to judge say that its architecture is good, and typical of its period. For some years it may continue to serve as county building, but not always. What shall then preserve this landmark rich with the memories of Lincoln?

Courtesy Houghton Mifflin Co.

The Old State Capitol

Still another memorial, which is believed to be unequaled, is the collection of Lincoln documents, books and pictures belonging to the Illinois State Historical Library contained within the beautiful Illinois Centennial Memorial Building on the new capitol grounds. This memorial should be more definitely linked with the others.

Every visitor wishes to go to these four memorials, all of which are within the boundaries of the city. They are variously in the custody of state, county and city. We have spoken of some of the needs of each. They all need to be connected. They are too much like islands, with wastes between.

Springfield citizens after pondering these matters for some years have reached the conclusion that the time has come for undertaking such reconstruction of the city as may be necessary to suitably preserve and exhibit these priceless Lincoln memorials. And as the subject was studied it became clear that along with such an undertaking must be developed a thoroughgoing plan for the entire city. This became the task of the Zoning and Plan Commission; and on the plan the city planner went to work. The results are presented in this book.

It will be found that the proposed development for the Lincoln memorial areas will be woven into the fabric of the entire city. For example: The visitor enters through the gateway, the union station, and comes out on Capitol Avenue which has become a stately parkway bordering the Lincoln Homestead with the Capitol terminating the vista. From the

enlarged grounds of the state group, the parkway proceeds on the north axis of the Capitol stretching away to the Lincoln Monument in the distance. We observe that this unit of the Lincoln plan involves railway reconstruction, the creation of interior parkways and their street-work, the widening of some streets, the removing of buildings and the vacating of ground for the creation of the setting for the Lincoln Homestead and the enlargement of the Capitol grounds, the re-routing of street car trackage—in fact, it involves all branches of city building, and must be an organic part of a complete plan.

We have spoken of the situation of the Lincoln Homestead and the need of improving the surroundings. Here we have faced a puzzling problem. We have felt that a little plan would not meet the expectations of the public that revere him. Then there is the question, What is a fitting environment for Mr. Lincoln's home? Certainly it is not possible to turn Springfield back into a town of 10,000 as of Lincoln's day. Neither do we believe it is desirable to restore the neighborhood to its condition of scattered houses and unimproved streets of 1860. Better, it seems to us, to preserve the homestead in its original form and give it beautiful and dignified surroundings. Lincoln was above all a citizen; one who never shirked a public duty, deserted principle or compromised his conscience—all his life he was an example for public servants. What could be more appropriate than a civic center for association with the name of Lincoln?

Courtesy Houghton Mifflin Co.

The old Wabash Station where Lincoln bade farewell to his neighbors and friends

It is proposed to include with the Lincoln Homestead adjoining ground comprising about seven city blocks or about twenty-five acres. The plan is shown in this book. In brief, the idea is the creation of a National Patriotic Center in which Lincoln's home would remain undisturbed. An open-air theater as a place of public assembly would commemorate the spoken word of Lincoln. Bordering the grounds would be sites for national memorial, and civic buildings.

Besides the four principal memorials of which we have spoken, there are within the city a dozen or more tablets marking sites and events touching the life of Lincoln. A visitor who makes their round and hears their stories may almost review in fancy that quarter of a century of Lincoln's life in which he "passed from a young to an old man".

The story of his early manhood belongs to New Salem, the pioneer village on the Sangamon. It is an inspiring story—his growth from stranger to leader, from laborer to legislator. In that rude life, he became respected for his physical strength and courage, for his resourcefulness in any emergency, for his good humor, gentleness and honesty. There

he read English grammar, learned and practiced surveying, was river-man, clerk and postmaster; and began the study of law. By his exertions he succeeded in everything except in trade—there he failed, and was oppressed by poverty. His friendliness, activity of mind, and his gift for stump-speaking drew him quickly into politics. He was twice elected to the legislature. At Springfield, the county seat, he formed lasting friendships with public leaders; and when it became the capital, he moved there to go into the law.

New Salem passed; but its chronicle will always live. Under the authority of the state, the Lincoln New Salem Association has acquired the old site as a memorial, and the state has restored several of the log cabins and erected a pavilion for a museum. And so, there has been planned a driveway down the Sangamon Valley to New Salem to unite that memorial with the others. How this may be made a beautiful drive is told in this book.

Courtesy Houghton Mifflin Co.

The Lincoln Monument

We ask a careful study of the complete plan which would join together all these Lincoln memorials. These things we think will be apparent: That this is a large plan. That it deals with the most sacred memory known to the nation. That it cannot be carried through as merely a local, or even a state undertaking. That it must be approved by the nation, and should command sympathetic interest wherever the name of Lincoln is spoken.

If it be thought that we have laid too much emphasis on memorials in stone and bronze, our answer is: We realize that in this presentation we have passed over the *true* memorials to Lincoln, which are in our hearts and souls. But we cannot wear our hearts upon our sleeves nor talk about our souls. Man still needs visible symbols to stir his imagination and paint the picture. Hence our concern for the preservation of those symbols. To preserve and enhance those symbols—such, we believe, was the obligation laid upon us as of a heritage by last testament when Lincoln, with the generosity which was his nature, said, "To this place and the kindness of these people I owe everything".

INTRODUCTION

MODERN cities, for the most part, have been the direct result of industrial centralization, occasioned by a division of labor which supplanted the part time artisanship once carried on in rural districts.

In this country during the pioneer days, most of the manufactured articles needed for local consumption and for limited barter abroad were made by hand in the little hamlets or on the farms. Textiles, shoes, guns, furniture, tools and various other commodities were made in this way and there resulted an excellence of craftsmanship which gave a widespread reputation to these goods.

Early New England in this way became far famed, and because of the increased orders for manufactured products the need arose for quantity production on an efficient basis. This resulted first in piece work, where the laborer made but a small portion of the finished article. Labor saving machinery came into use and large numbers of workmen were brought together, where, under competent supervision, goods could be made more uniformly and cheaply. Thus the factory came into existence and due to the bringing together of many workmen and their families thickly settled districts resulted necessitating stores, churches, schools, paved streets and the other requisites of urban existence.

The modern city, therefore, presents a striking contrast in its inception and development to the little trading town which often formed its nucleus, or to the early European cities, which were walled in places of refuge and trading centers supported by the surrounding agricultural territory.

The city of today is an earning and producing organism—a machine by which and through which raw materials are turned into finished products. In the complex it resembles the factory which it contains and like the factory it must operate efficiently if it is to meet the test imposed by modern civilization.

While it may not be true that every city must earn its bread by the smoke of its chimneys, it must have a visible means of support to insure against decadence. The oft boasted "City of Homes" signifies little unless that city provides facilities by which the occupants of these homes may produce by their minds or their muscles to the best advantage afforded by advanced standards. Just as competition and the law of supply and demand resulted in machinery, methods, and the development of plants by which better goods could be turned out faster and more economically, so have the demands of modern industry called for the building of cities in such a way that they will meet the requirements of modern production. Irrespective of the excellence of their integral parts they must fall short in this test unless they are planned and built with this object paramount. They must provide suitable places where industry can be carried on and must supply to these industries the very best facilities of transportation and inter-city traffic; they must be able to receive raw products and ship finished materials to market conveniently; there must be adequate water supply and equitable freight rates. A high quality of workmen and a low labor turn over must be insured and these, in turn, require living conditions which will attract and hold the best class of workmen, as well as the best class of employers. Sanitary conditions must therefore be right, and there must be furnished schools, libraries, parks,

residential sections, street car transportation, police and fire protection, and all else that will make the city a satisfactory place of abode.

We have indeed passed the point where the ordinary requisites of urban life, such as have been enumerated, prove sufficient to make the city outstanding and sought after. It is not enough to build to meet ordinary standards. There must be produced within the city those elements that will make for culture, refinement, the appreciation of art, and in general, the better things of life so that civic pride will be aroused, which must always reflect in the city's renown and further progress.

We often hear the thought expressed that it is not desirable for a city to grow larger. To this the answer can only be that if a city is to keep stride in the march of progress, if it is to meet competition, which manifestly exists between cities, and in short, if it is to keep from going backward, it must grow. City progress is synonymous with constantly increasing population. The life of a city, like the life of an individual, is measured by growth.

During the years elapsing between 1869 and 1914 the population of the United States increased by 261 per centum. During that time the percentage of people living in cities increased tremendously. Perhaps the most spectacular growth in urban development has taken place in the middle west section of the country.

Following the Civil War there was a decided drift of population into the Mississippi Valley. Railroad building began and continued with unprecedented rapidity; towns sprang up along these railroad lines and it was but a few years before the need for manufactured products to supply the local trade caused these towns to build into cities and to become active centers of industrial enterprise.

Eastern firms moved into the new country, model plants were built and, without in this case going through a period of hand wrought materials, there grew in competition with the older cities of the East, communities where industries were carried on by the most improved processes and under sagacious administration. This, coupled with the facts that these western cities had the advantage of central location for distribution, raw products close at hand, such as coal, ore, gas and lumber, and were surrounded with farming territory of wonderful fertility, gave reason for their exceedingly rapid growth. It was not long before a wonderful network of railroads had been built, including both trans-continental and feeder lines, and with the establishment of labor markets the middle western cities achieved a truly enviable position.

Not a little of the successful growth of the middle western city can be attributed to its physical layout and to the character of the terrain upon which it was built. For the most part, the land was comparatively level, but sufficiently drained and cities could spread out in all directions using comparatively inexpensive land and being unhandicapped by steep grades and rock formation.

The early town site was laid out with square or rectangular blocks and with wide streets as a precaution against the spread of fire. While this checkerboard plan of street arrangement has been severely criticized, there is no doubt that it was a vast improvement over the narrow, tortuous, and inconvenient streets of European and New England cities. These first town sites, usually covering approximately a square mile, for the most part constitute the central or down-town sections of our present cities. The regularity and generous width of streets in these sections now enables the handling of traffic in a way to

produce envy in older cities, and further provides against the necessity for wholesale and costly street widening.

Difficulties, however, began with the addition of new allotments during the first boom days. These were laid out by individuals or land companies without consideration for town planning and with the idea in mind of arranging the land into lots in a manner to insure the quickest and greatest returns. Important streets leading from the center of the city were narrowed and blocked. Grotesque and inconvenient arrangements were put on record. These unfortunate misfits in later years spelled unnecessary expense in providing public utilities and in the maintenance and use of the streets.

A later era saw the advent of the curved street or "landscape" subdivision. This was oftentimes attractive in itself and became exceedingly popular for residential purposes, but of all the departures from the original quadrangular layout this type of subdivision has perhaps proved most troublesome. In too many instances main thoroughfares were blocked, making access to the city most inconvenient. Oftentimes these subdivisions were plotted on level ground where little excuse existed for curved streets and in the direct path of the city's growth, forming a most effective barrier thereto.

Had their founders realized the extent to which these cities were to grow, the original town sites might easily have been planned to include the fundamentals of street design, even then well known, and today replanning would be unnecessary. Had provision been made for extending the original streets in a logical manner as the town took on size, had diagonal thoroughfares been provided, had curved street subdivision been limited to areas of broken land along streams and hills, and had provision been made for railroad rights-of-way, school sites, parks, and public buildings, little would be left for the city planner of today.

Through the lack of such a plan and through the lack of intelligent central control in our city development, conditions have grown worse year by year. The lack of perspective, the inability of city authorities to control the development of the city as a whole, and the leaving of this development to individuals with a myriad of ideas have led to a complexity of structure which is hampering more and more the functioning of our cities.

The demand for a cure for this constantly increasing evil has manifested itself in practically every city of importance, especially in this newer and more progressive section of the country, and it is interesting to note that the movement, which has to date resulted in the preparation of city plans of one kind or another for approximately three hundred of our cities, has been fostered not so much by reformers and politicians, as by groups of business leaders who realize that the progress of industry demands the proper structural upbuilding of the city in which it is contained.

It has been amply proven that it is not enough to advertise a city, but this advertising must be accompanied by proof that the city in question is so built and operated as to offer real quality to newcomers.

A city plan, therefore, while employing itself in the arrangement of the structural features which go to make up the growing city, has the closest possible relationship to that city's progress from an industrial standpoint and to the development of that character of citizenship that makes for community strength. If properly conceived and carried out, the plan will inspire a city of real homes, for it will create a desire to dwell and work in the

city and to be satisfied with it. It will lead to the adaptation of art, because it will make for a higher class of citizenship wherein the desire for such things is inherent and it will make for a better government because of the higher average of intelligence.

The keynote of a successful city plan must be orderliness. The various departments of the city should be placed in proper juxtaposition so that they will not interfere with each other. Thus, as it is necessary for an architect first of all to prepare a floor plan of his building designating where the various rooms and departments will be placed, the first step in city planning is to provide a skeleton showing where the various departments of activity may be placed to their own best advantage and for the protection of others.

A comprehensive scheme for districting or zoning is therefore the first step to be undertaken, and in this connection the satisfactory placing of future industries is most important and therefore of first consideration. Upon this foundation other details of the city should be built. The street plan, the various departments of home life, the location of commercial areas, those for schools, parks, railroads, and street car lines, all have to be guided by their relation to the workshop or factory district.

City planning in order to be worth while must in reality be regional planning, carried on without regard to the city's political or geographical limits; even county and state lines must be disregarded in the interest of satisfactory community development. That which comprises the present city must be considered analogous to the first town site. The mistake must not be repeated of neglecting to recognize the fact that growth must continue due to the exertion of the city's own expansive force and to its power to attract. The fact should not be overlooked that the most important application of the plan has to do with the fringe of the city where development is constantly taking place. Here, judicial control, inexpensive in itself, may prevent mistakes which would cost millions.

The outskirts of a city always grow faster than the central districts, owing to the tendency towards decentralization. Manufacturing plants, outgrowing their original sites, move out to where land is cheaper and where more space is available for expansion. New industries coming to town seek the outskirts for the same reason and there it is that new homes are built in greater numbers. The plan, therefore, should include an area large enough to care for the growth of the entire community for several generations and in turn should be of such a nature as to provide for still further extension. Under no circumstances should this greater city again be circumscribed by a broken street arrangement, or by an artificial barrier which may in time again hamper its growth.

The plan should be American. While occasionally we may copy in part from European plans, there is no pattern which may be followed generally. The idea of the Ring thoroughfare, prevalent in European cities, may be applied to circumferential highways, tending to lead traffic around and past the congested center of the city, but it is unthinkable to adopt in a wholesale manner a program of crooked and narrow streets, which form the subject matter of so many descriptions extolling the charm and picturesqueness of medieval towns. Neither can we properly apply on a large scale, for the purpose of extending our present cities, plans which have been found satisfactory in small communities such as Hempstead, Litchfield, Essen, and the housing schemes carried out in this country during the war.

We need to plan courageously and on a scale sufficiently imposing to satisfy the American imagination, and especially in keeping with the almost boundless horizon of this

wonderful new country, at the same time keeping in mind the rules of city building economics.

No project is too big to be undertaken if it can be proved that it will bring adequate returns on the investment. The American business man who today represents in type American leadership wants his city properly outfitted, as he requires his home, his office, his store, or his factory. He is willing to pay for such outfitting, but he wants to know in advance how the plan is going to work out and if it will be worth the cost.

While the demand is first of all for a practical city, and while America is not generally reputed to be a nation of art lovers, nowhere is there a more definite movement to build cities that will be uniformly harmonious and beautiful than in this country. Even in cities which have made no provision for city planning are to be found conditions relative to sanitation, street maintenance, park development and home building, which in their uniformity of application perhaps meet no parallel abroad. It is, therefore, not so much the desire to emulate older cities as to continue well in the vanguard that inspires our city planning today. It is a movement in keeping with American progressiveness and with the desire of Americans to live and enjoy in the fullest measure.

THE SPRINGFIELD AREA

WITHIN one hundred miles of Springfield dwell two million people, eight hundred thousand of whom live in cities and towns of one thousand or more. Interspersed is an agricultural and mining territory of unprecedented wealth. Underlying the Springfield area is one of the richest coal fields in the country and this has a vital bearing on the City's future.

Within this one hundred mile radius there is a market for 150,000 kilowatts of electric energy. It may be well to analyze the Springfield situation as regards the making and marketing of this potential commodity. The closest real competitors are St. Louis and Keokuk. It is a well understood fact that where electric energy is manufactured by steam power approximately four hundred tons of condensing water are needed for every ton of coal consumed.

Peoria has ample water supply, but the coal at this point is poor and scarce. Bloomington has little coal or water and the same is true of Champaign, Mattoon and Sullivan. Cities in this district which have coal but little water are Pana, Centralia, and Belleville. Those which have ample water, but comparatively little coal include Alton, East St. Louis, Quincy and Decatur.

Springfield's present water supply militates against the development of what might become an important industry in itself and that which would serve as a magnet to draw new industries to the city. The shortage of water at present is even threatening to cause power companies in Springfield to abandon their locations and seek other territory. Single industries in smaller cities often use process water in an amount to exceed domestic use.

A Proposed Impounding Lake

There, however, is the Sangamon River, fortunately not leading through the built up sections, but within close proximity, lying to the north and northeast of the city and separated from the built up section by a considerable area of approximately level land. The character of the river valley is such that at comparatively little expense for land and dam, there can be created a lake some twelve miles long, with a surface area of fifteen square miles and impounding more than twenty-five billion gallons of water, sufficient, without replenishment, to supply the domestic needs of a city of 200,000 for a period of three years.

Such an impounding lake would undoubtedly be a great boon to the city. It would insure an ample water supply for the rapidly increasing domestic needs, besides furnishing facilities for water sports and lake-side cottage sites.

The area lying to the northeast of the city is most productive of coal and is accessible to all railroad lines entering Springfield. Situated as it is, to the leeward of the city, this area therefore constitutes without question the best site for future industrial growth.

A logical growth of the residential section would be to the east, south and west of the industrial section. Already the trend of the better class of housing has been southwesterly from the center of Springfield. Broken and wooded land is always desirable for this purpose, especially where parks and boulevards may be arranged to use the

more rugged lands. The valley of Spring Creek, leading as it does from the Sangamon southwest and around the city, offers such a happy combination. Again, to the east of Springfield is broken ravine land of considerable natural beauty. Park lands extending through these new districts could with little difficulty be connected with the larger units of Springfield's present park system and in turn by means of parkways to the city's center. In general composition, therefore, Springfield bulks well.

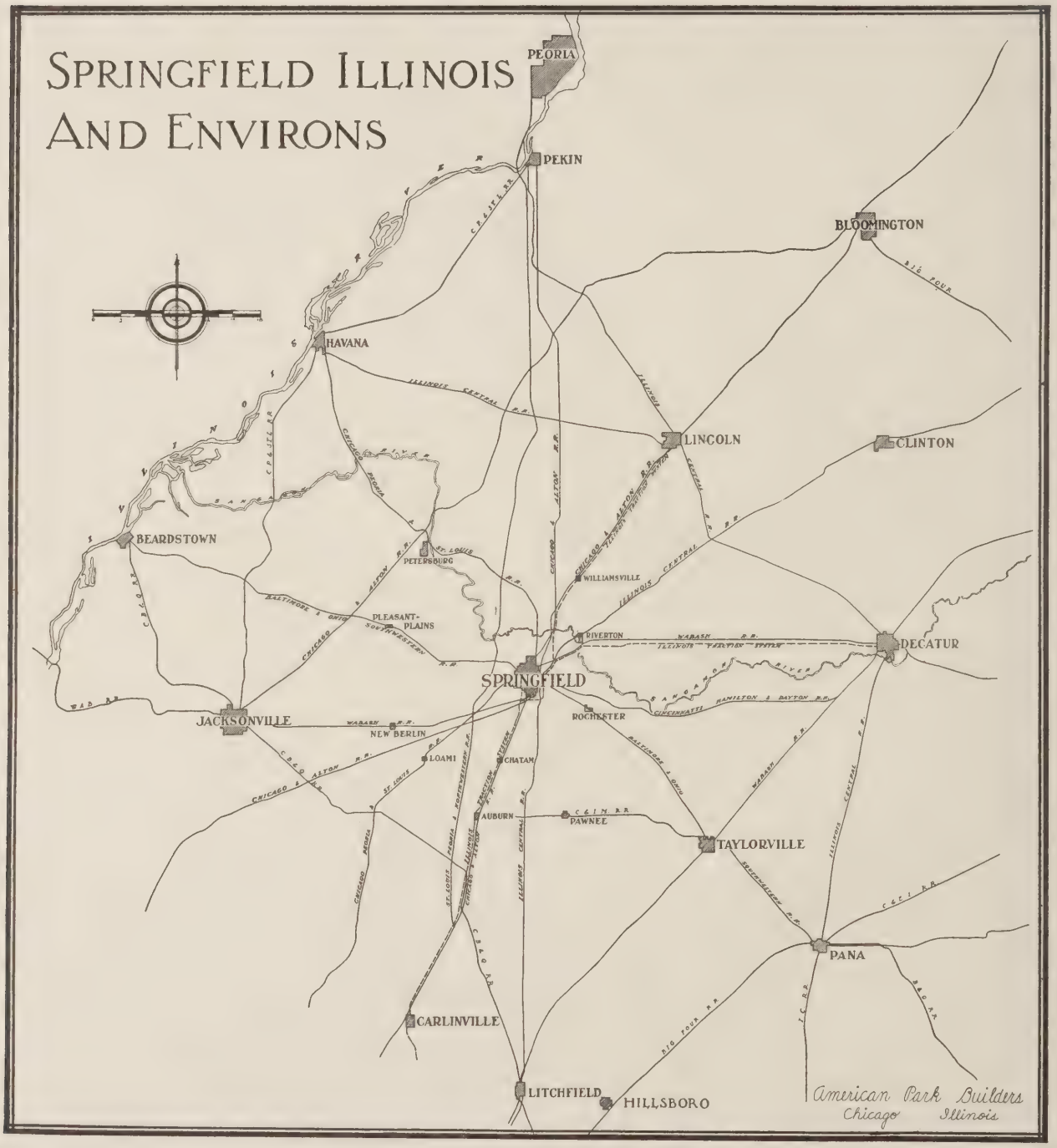


CHART 3—*Two million people dwell within one hundred miles of Springfield*

From the standpoint of sanitation Springfield's topography is excellent. The Spring Creek Valley provides a way for carrying sewage from the extreme south section of the city to an admirable site for a disposal plant, well below the present water works, while the natural divide to the southeast makes possible, if needed, a secondary disposal plant without pollution of the Sangamon above.

From the standpoint of transportation, Springfield is well supplied with railroads approaching from all points of the compass. On the whole, the service is prompt and efficient.

Springfield has been described as a city of homes. The city possesses many fine residences. What is more important, however, is the comparatively large number of well kept but modest homes, owned by their occupants. The wealth of a city rests not so much upon the number of its show places, as upon the fact that its citizens for the most part are permanent residents, owning their own plots of land, thus insuring against labor turn over and a lack of civic interest.

The fact that Springfield is the capital city of the state has an important bearing upon the policy of any plan for its betterment.

It may be that in certain cases leaders in cities have regretted the presence of the state capitol and it may be said in passing that certain capital cities have progressed in spite of the state capitol, rather than because of it. There is perhaps no legitimate reason why the presence of a capitol and its companion buildings should have other effect than to lend prominence to the city in question, as well as to add beauty and grandeur.

The Sangamon may easily be broadened to a great impounding lake to supply the Springfield community

In order that the public grounds and buildings of Springfield may be designed on a scale sufficiently imposing to be in keeping with the great state they represent, they must be kept free from unfortunate association with factories, railroad yards, and the like. The zoning and railroad plans, therefore, take on added significance in this instance.

Historically, Springfield occupies a place distinct, for out of a galaxy of great deeds and the presence of great men stands forth her intimate association with Abraham Lincoln. Springfield can not boast of his birthplace, but here it was that Lincoln lived, moved and was loved. Here, in the only home he ever owned, were born in him those qualities of statesmanship, which, added to those of manhood, have caused him to be called the "greatest since St. Paul"—here his body rests, and because of these things Springfield is a mecca for patriotic Americans. It is fitting, therefore, that Springfield should be the capital of the State, that every public servant sent thereto by a self-governing people may receive inspiration for service.

ZONING

DURING recent years the zoning of cities has achieved great popularity. A recent bulletin issued by the United States Department of Commerce states that 24,000,000 people or 43% of the urban population of the United States live in zoned cities. On January 1, 1925, three hundred and twenty cities were zoned, as compared with one hundred and fifty-nine in 1923. Enabling acts permitting zoning have been passed or are being passed by nearly every state in the Union.

The zoning movement unquestionably started from the inherent desire to protect the home against encroachment by factories, stores, filling stations and apartment houses.

The protection of the home is one of the foundation principles of our democracy and it is not surprising that zoning should at once meet with popular favor. People are apt to overlook the fact however that it is quite as important to protect industries and even stores and apartments, which after all are necessary to urban development and should be protected and safeguarded.

Land so situated as to be primarily useful for purposes other than the building of residences takes on a consequence all its own. This fact should be taken into consideration and property values maintained and encouraged, especially if by doing so the entire community is benefited from the standpoint of convenience.

Zoning when considered as a part of city planning should be applied first of all to that part of the city which is concerned in producing wealth and perhaps only incidentally to that part which furnishes domicile.

Unfortunately, zoning as it is commonly applied has to do merely with conditions existing in the city in question at the time being. Zones of use accompanied by those of height and area of buildings are established by ordinance and made to fit conditions which must of necessity be considered temporary and transitory. A very obvious fact is overlooked—that the city in question is constantly subject to growth and expansion and that these zones of use must grow accordingly.

The enlargement of zones is generally left to the discretion of a board of appeals or similar organization which passes upon requests by property owners and is continually engaged in making enlargements and adjustments to the zones at first laid down. Such boards of appeals are made up for the most part of citizens not versed in the science of zoning and who many times are not guided by the advice and consultation of city plan experts. The result is that zones at first arranged with more or less scientific applicability are allowed to spread out indiscriminately and without a definite purpose in view. This process over a time creates quite as bad a condition as prevailed before zoning was applied.

It is perhaps due to this fact as much as to any other that zoning is already meeting with no small degree of distrust and apprehension, so much so that courts are handing down many conflicting decisions which might indicate that the whole theory of zoning is at this particular time in serious jeopardy.

The trouble apparently lies in attempting to thrust zoning upon cities without a comprehensive program to begin with. Zoning should be fundamental rather than superficial. It should be to the city exactly what the floor plan of a building is to the structure. It

should lay out at the onset in a broad and comprehensive manner the areas which are best suited for various activities and in order to do this the zoning plan must reach out far beyond the built up section of the city and must form the foundation of the plan, regional in scope, sufficient to accommodate the city's growth over several generations.

There should then be prepared on a smaller scale and in more detail a zoning plan and ordinance to fit existing conditions and this may be termed the immediate or first step plan. Put into force, this plan will take care of the existing situation and will at once stop many abuses. Enlargements and alterations to this first step plan can then be made with the comprehensive zone plan as the definite objective, and in this manner the board of appeals is given a carefully thought out program of action.

It is reasonable to assume that courts will take cognizance of the vital relation of zoning to proper city building when such a comprehensive plan for zoning is made the foundation of the city plan, rather than to be influenced by sentiment or by land values.

Very largely zoning is applied and kept in force by public sentiment and unless good and sound reasons can be set forth for the location of zones within prescribed boundaries, this vital aid is apt to be withdrawn.

Partial and piecemeal zoning can never justify itself, either in the minds of jurists or the public in general.

Comprehensive Zone Plan:

Zoning for Springfield therefore begins with the blocking out into zones of use the entire area considered in the plan for greater Springfield, namely that area comprising 6,643 acres made up of streets, town lots and building sites already in use by the community, and in addition 10,497 acres or 16.4 square miles comprising land now lying around the city but which during the next two or more generations will under normal conditions be needed for the city's growth and expansion.

As shown by Chart No. 4, this entire area has been divided intozones for distinct uses and this division has been made with full consideration to various influencing conditions, such as prevailing winds, character of terrain, location of water supply, position of railroads, trend of city growth, location of present industries, of coal deposits, and the like.

Based upon this comprehensive zone plan theplans for main thoroughfares, secondary streets, railroad corrections, street car line extensions, park locations, and in fact all other plans in connection with this work were drawn, and finally there has been prepared the immediate or first step zone plan, in more detail and accompanied by an ordinance, which on July 28th, 1924 was adopted by the Springfield City Council and published separately in pamphlet form.

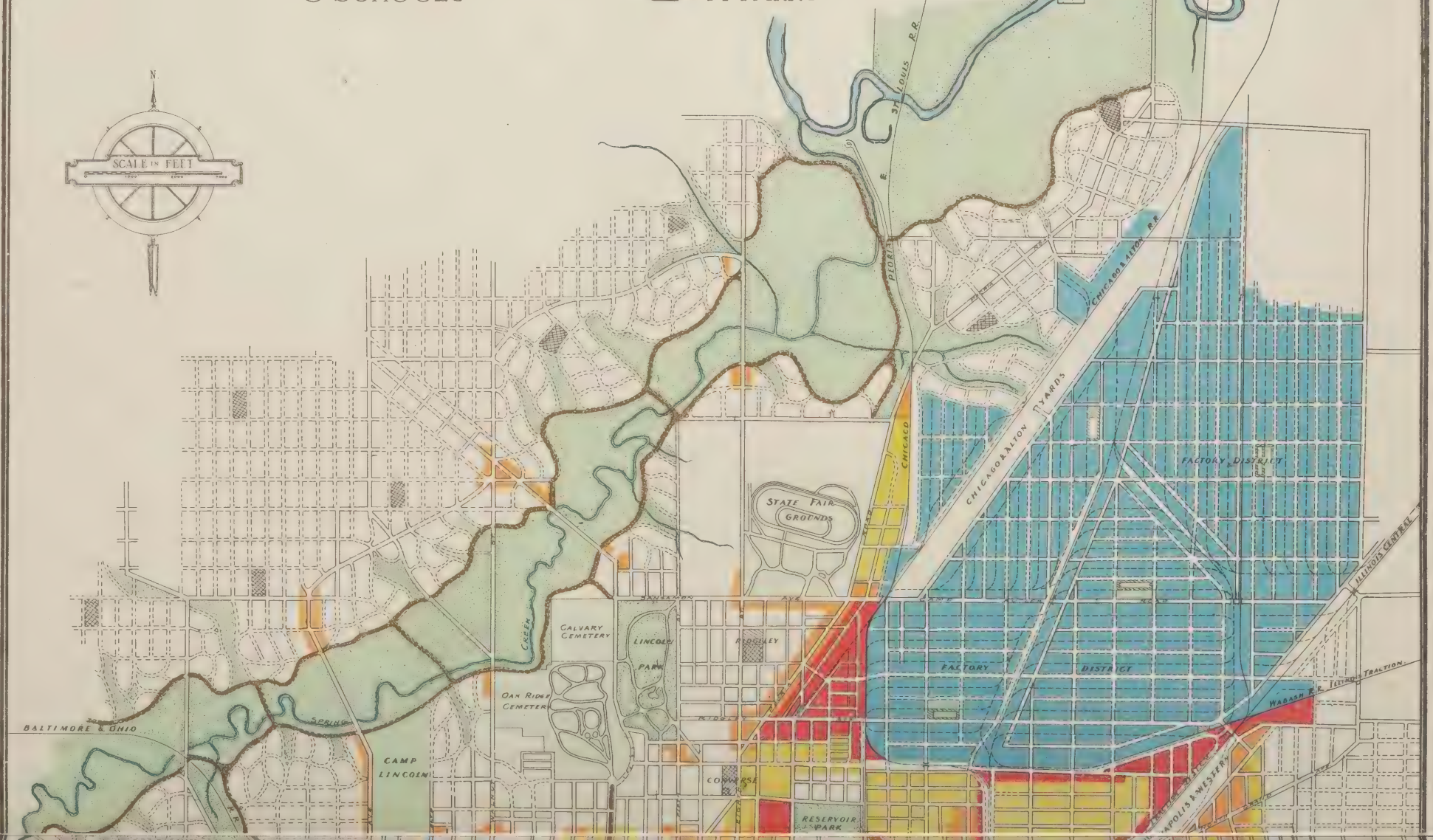
It is obvious that the comprehensive zone plan can not be so adopted by the municipal government for the reason that it is applied to territory in many cases lying far beyond the present city limits.

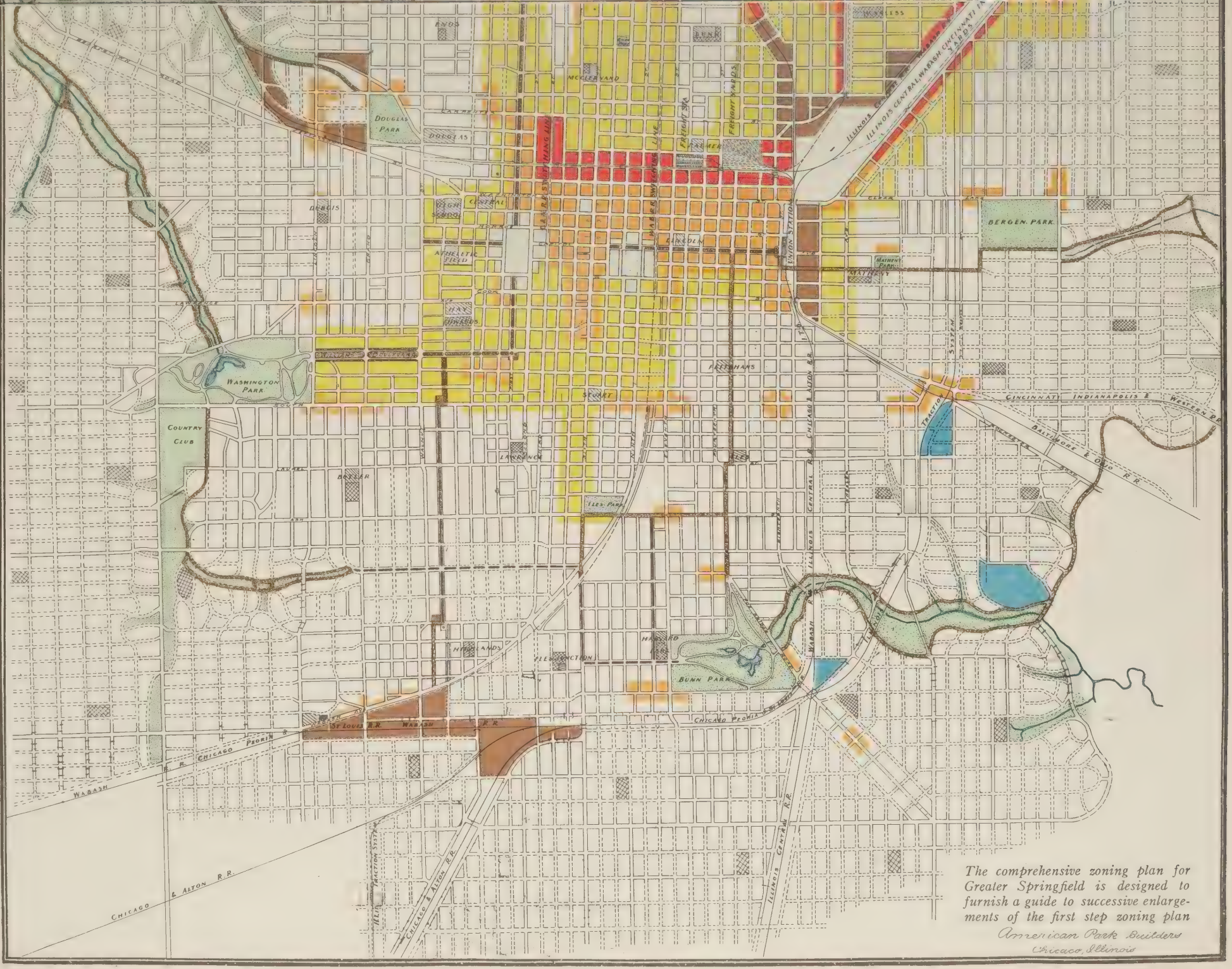
Both the comprehensive and immediate zone plans bear a definite relation to areas now occupied for various purposes in the present city. In the present built up city 200 acres are devoted to industries, 300 acres to railroads, 200 acres to stores and commercial institutions, 130 acres to apartment houses, and 5,753 acres to single family houses and scattered vacant building lots. In addition there are 1,000 acres in parks.

THE SPRINGFIELD PLAN

COMPREHENSIVE ZONING MAP

A-RESIDENTIAL DISTRICT
B-RESIDENTIAL DISTRICT
C COMMERCIAL DISTRICT
D-LIGHT INDUSTRIAL
E-HEAVY INDUSTRIAL
F-BULK MATERIAL YARDS
G-SCHOOLS
H-PARKS





The comprehensive zoning plan for Greater Springfield is designed to furnish a guide to successive enlargements of the first step zoning plan

American Park Builders
Chicago, Illinois

The average population density over the entire city within the present city limits is 8.7 people to the acre, the average density in the residential section being 10.3 people to the acre. Based on an average population density of 12 to the acre, which is considered conservative for Springfield but is low for larger cities, greater Springfield is arranged to accommodate approximately 200,000 people, which as indicated by the population curve will be in the community by the year 1968.

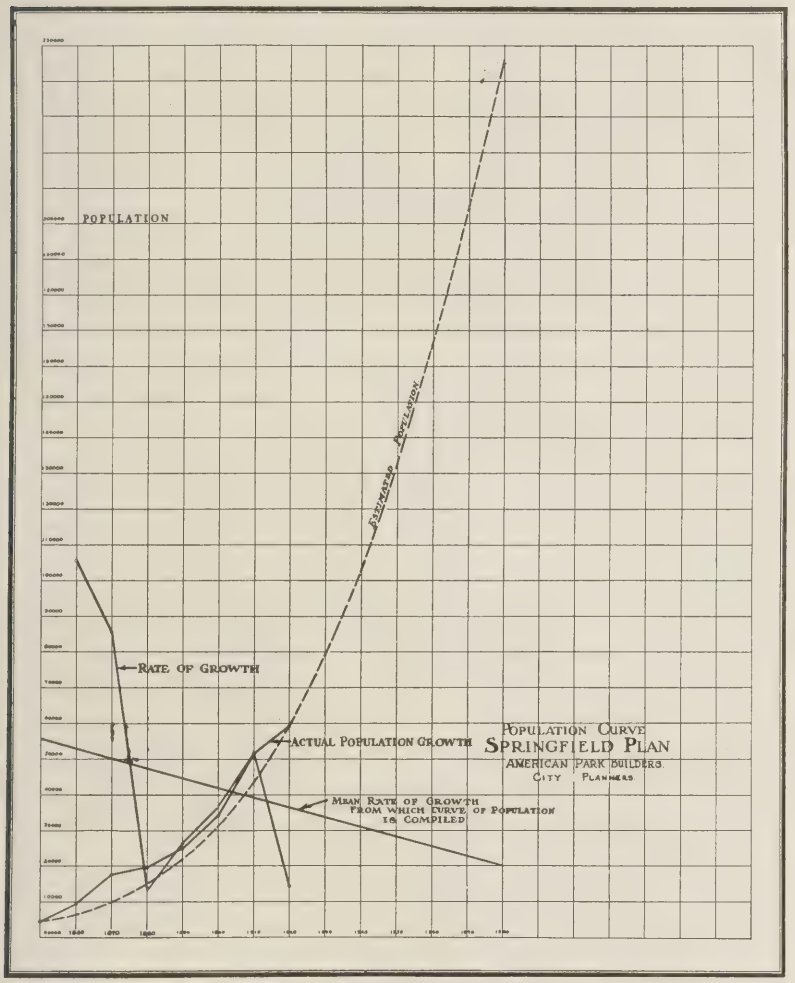


CHART 2
Population Curve for Springfield

In referring to the population curve, Chart No. 2, it will be seen that the rate of growth has had a tendency to decrease, as for instance from 105% per decade in 1860 to 14% in 1880. In 1910 the rate of growth was 52%, while in 1920 it dropped again to 15%. The average rate of growth has therefore decreased over this period at the rate of 2.7% per decade. This has been taken into consideration in the plotting of the curve for increased population.

The comprehensive plan shows in comparison with the above acreage, 2,100 acres devoted to heavy industries, 350 acres to light industries, 800 acres to commercial uses, 1,840 acres to apartments, and 3,000 acres to schools, parks, and forest preserves.

It will be noted that the heavy industrial district has been located to the northeast of the city, spreading out in a fan shaped area from a point now forming one of the industrial sections. There are several reasons for this particular location. First—as will be noted by the wind chart, prevailing winds are from the southwest. A factory district to the leeward of the city would be therefore far less objectionable from the standpoint of smoke, gases and noises. The character of the terrain in this location is suitable for factories and their attendant freight lines. This location would also place the factories nearer to the large existing coal mines and to the proposed impounding lake from which water could be secured at minimum expense.

Districts for light industry are placed as buffer strips between the heavy industrial and residential sections, and in such locations as to include most of the present factories,

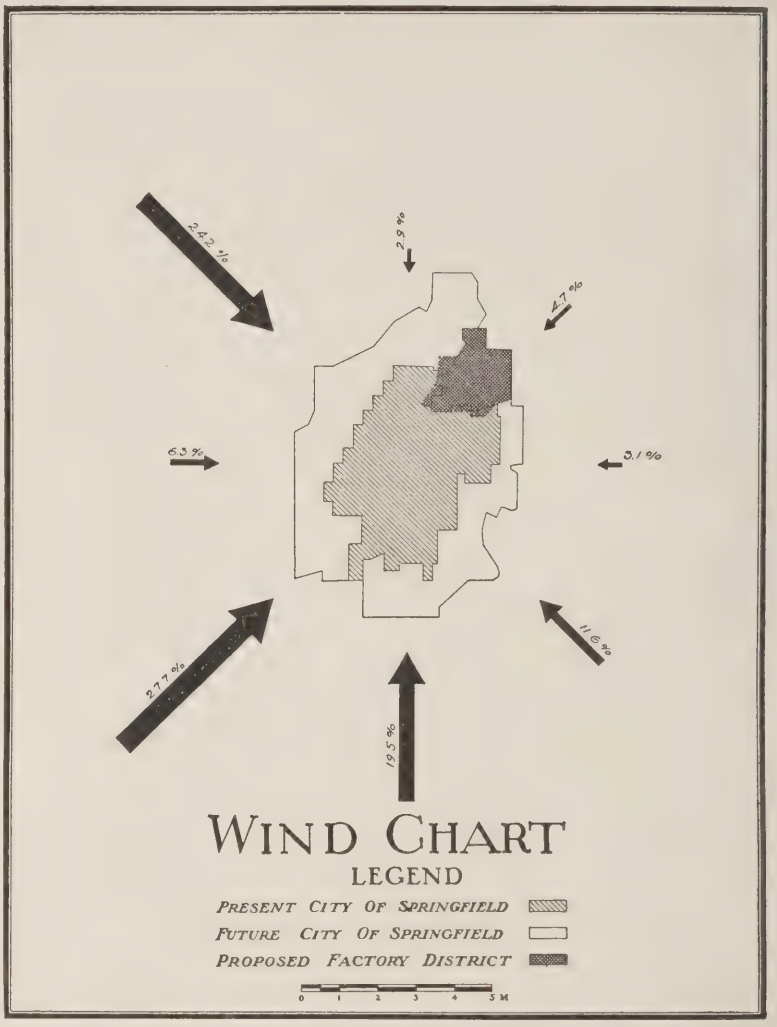
it being proposed that while these existing industries would not be molested they would be encouraged to gradually transform into uses not objectionable to surrounding territory.

The commercial district would absorb the present downtown retail section and would extend eastward in the general direction of assumed industrial growth.

Neighborhood commercial districts are placed at convenient points to serve to the best advantage the residence districts around.

In this plan comparatively large areas are designated for apartments. These would naturally be grouped close in on land which in time will be too valuable to be used for single family houses.

The comprehensive zone plan also sets forth areas for parks, forest preserves, boulevards, and school sites.



Average prevailing winds over 40 year period compiled from U. S. Government records

Immediate Zone Plan:*

As set forth in a separate publication, the immediate zone plan consists of three charts showing restricted areas for special uses, height and area of buildings.

The following table shows comparative areas in use in the present city and as provided for under the comprehensive and immediate zone plans.

	Present Area	Immediate Zoning Plan	Comprehensive Zoning Plan
Heavy Industries...	200 Acres	1100 Acres	2100 Acres
Light Industries....	60 "	455 "	350 "
Commercial.....	200 "	380 "	815 "
Apartments.....	130 "	700 "	1840 "

*Adopted by the Springfield City Council July 28, 1924—Published separately.

THE SPRINGFIELD PLAN

MAIN THOROUGHFARE MAP

EXISTING STREETS

PROPOSED STREETS

Beardstown Rd.
Jefferson St.
Carpenter St.
First St.
Washington St.
Capitol Ave.
Capitol
Union Station
Cook St.
Clear Lake Av.
Lawrence Av.
Williams Blvd.
South Grand Av.
Rochester Rd.
Ash St.
Lincoln
Ave.
Walnut
Lowell
Third
Sixth
Ninth
Eleventh
Fifteenth
Fourteenth
Eighteenth
Wheeler Av.
Jacksonville Rd.
St. Louis Rd.
Linn St.
American Cork Stock
Chicago Illinois

CHART 6

MAIN THOROUGHFARES

CHART No. 6 shows a proposed system of main traffic ways leading into and through Springfield.

It is suggested that the portion of Eighth Street between Sangamon and Peoria Avenue be widened to eighty feet to facilitate traffic through the city on Sixth Street.

In order to take care of through traffic to the southwest, Ninth Street should be extended to the South Jacksonville and St. Louis Roads by a new thoroughfare along the Wabash Railroad right-of-way. Much of the through truck service would in this way be diverted from Sixth to Ninth Street, relieving present congestion in the downtown section.

Washington Street, east and west through the city, would be connected with Jefferson Street with a short cut-off east of Walnut. This would give a better connection with the important Beardstown Road. East Washington Street is connected with Clear Lake Avenue, and a northeast diagonal is shown connecting with E. Grand Avenue and the Riverton Road.

The Petersburg Road from the northwest would be widened with connections to the southeast with Carpenter and Washington Streets.

A connection is shown with the Cantrall Road leading to the southeast over Spring Creek and joining with First Street, which in turn is extended past the cemetery and into the proposed boulevard on First Street.

To the southwest Lawrence Avenue is connected with the North Jacksonville Road by two proposed diagonal streets between Lawrence and South Grand Avenue.

Eighteenth and Wheeler Avenue are carried through with curved connections at Vine Street and the Litchfield Road.

Rochester Street to the southeast connecting with Cook Street is shown widened and extended, making a better connection with the south road to Decatur.

Peoria Road is shown widened to one hundred feet from Eighth Street.

South Grand Avenue would be carried through to connect with the Jacksonville Road.

The widening and parking of Capitol Avenue and First Street, discussed later under the Park and Boulevard Plan, will have an important bearing in this scheme of main thoroughfares.

These main thoroughfares, consisting for the most part of existing city streets and country roads, thus connected and extended furnish a framework for the secondary street system. They enable the extension of car lines at satisfactory intervals and furnish continuous through routes for both long distance traffic and for direct traffic between intercity points.

These thoroughfares should be widened to provide for the excessive use they will be forced to accommodate. In most cases they should be not less than one hundred feet in width. In the case of extensions the necessary width may easily be taken care of when land is plotted. The widening of country roads may also be easily carried out. In the widening of city streets, however, considerable forethought and not a little expense may be necessary. The method best employed undoubtedly will be to establish by ordinance a setback of building lines and to fix upon damages to property owners as new buildings are

erected. In most cases, however, these damages may in reality become benefits when increased frontage values due to the street widening are duly considered.

THE SPRINGFIELD PLAN

GENERAL PLAN

EXISTING SCHOOLS ··· PROPOSED SCHOOLS
EXISTING STREETS ··· PROPOSED STREETS
EXISTING PARKS ··· PROPOSED PARKS

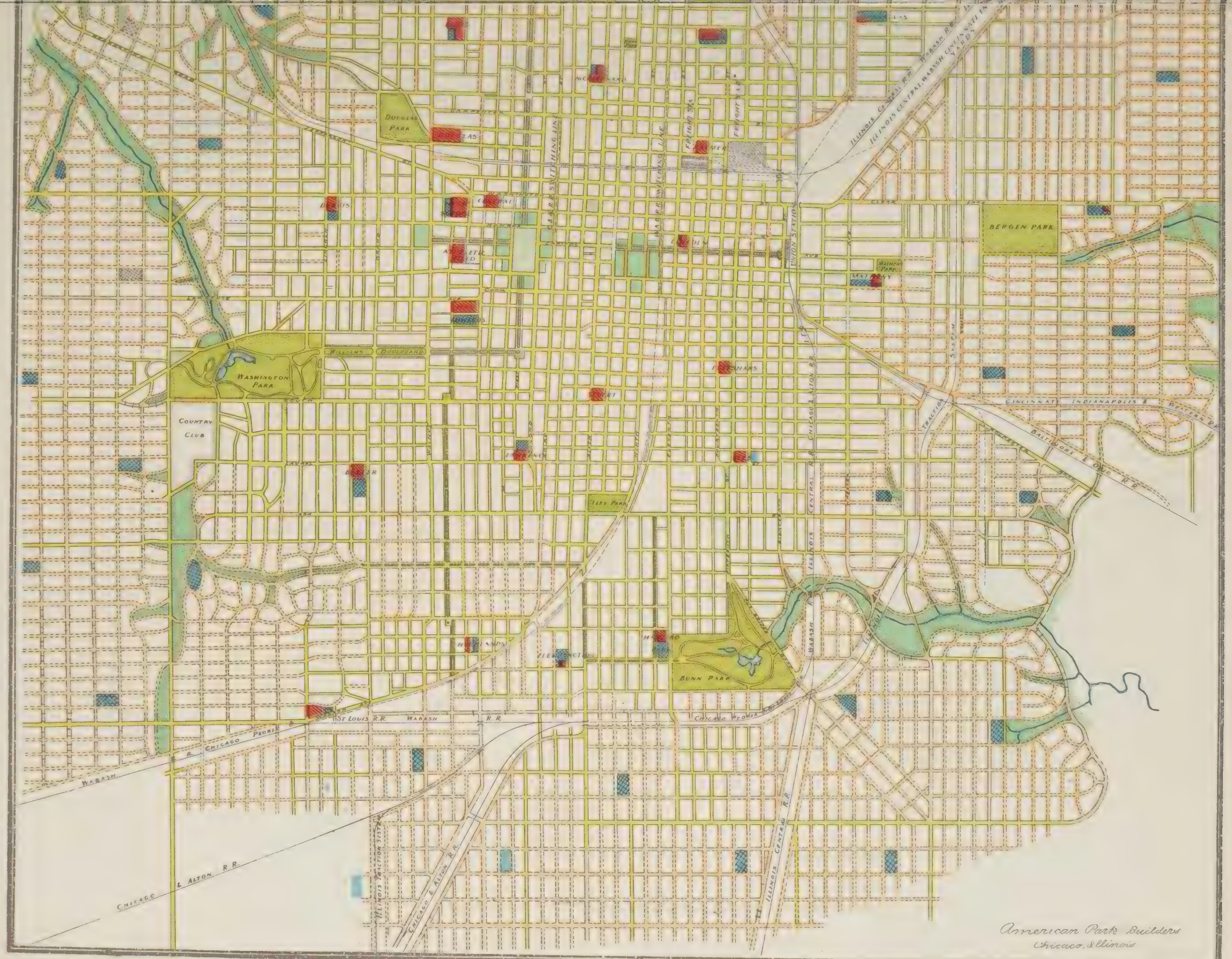

DOUGLAS PARK
WASHINGTON PARK
WILLIAMS BOULEVARD
COUNTRY CLUB
BERGEN PARK
BUNN PARK
LEES PARK
UNION STATION
ILLINOIS CENTRAL R.R.
CHICAGO & ALTON R.R.
WABASH R.R.
ST LOUIS R.R.
CHICAGO PEORIA & ST LOUIS R.R.
CINCINNATI INDIANAPOLIS & WESTERN R.R.
BALTIMORE & OHIO R.R.
ILLINOIS TRACTION SYSTEM
American Park Builders
Chicago, Illinois

CHART 7

THE GENERAL STREET SYSTEM

THE street system proposed calls for rectangular blocks with diagonals and with curved streets for residence districts along streams and ravines. Blocks are arranged eight by fourteen to the mile with one hundred foot streets on mile and half mile lines, and sixty-six foot streets elsewhere, except in the factory district.

Standard block sizes are 585.5 by 306.3 feet, providing 153-feet depth of lots. It is recommended that no alleys be used other than in the manufacturing and commercial districts.

Blocks have been arranged as far as possible with their long axes toward the city's center. Great care has been taken to make logical connections with existing streets.

Curved street plotting has been utilized in districts remote from the industrial section and where the topography of the land makes such street arrangement more pleasing and economical. Care has been exercised to extend these curved streets through to logical connections with both existing and proposed thoroughfares, so that no blocking of traffic will result in their use.

One of the examples of bad street plotting, nearly three hundred of which were found in the Springfield survey.

Areas arranged with curved streets generally have somewhat larger blocks than in standard plotting. This is desirable on account of the demand for larger lots in the better residential sections and by reason of the fact that it has been found desirable in such plotting to minimize street intersections.

Great difficulty has been found in harmonizing the variety of block arrangements found in Springfield. Detached additions have been plotted with various sized blocks and with streets not in line with older additions. To connect these detached streets it has often been found necessary to use curved intersections.

The street plotting has been carefully fitted with the proposed park areas and attendant parkways leading along the ravines and water-ways.

In the industrial district the plan provides for six by ten blocks to the square mile with one hundred foot streets on section and half section lines, with sixty foot longitudinal and seventy foot horizontal streets. Blocks would be bisected the long way by railroad streets of forty-five feet in width, which would provide for a single line of track and parallel switches. This arrangement would give a lot depth of 207.5 feet, which is ample for factory units.

As usual, considerable saving has been shown in the proposed scheme as compared

with the present street layout. This is more easily demonstrated on account of the large areas in Springfield plotted to square blocks of rather small dimensions. In the central portion of the city 36 percent of the entire area is contained in streets, or 23.76 miles of street to the square mile. In comparison, the average area devoted to streets in the proposed plotting is 27.94 percent or 20.5 miles to the square mile. Reducing this to miles of streets saved in the new plotting, as compared with what would have obtained had the original plan of Springfield been extended, a saving is shown of eighty-five street miles representing $8,693,000.00 in land, figured at an average price of twenty cents per square foot, and $14,314,000.00 in street improvements, or a total of $23,000,000.00.

While it is true that this large amount of money would be expended under ordinary circumstances by individuals in developing private land for sale and that this money would be returned with profit through the sale of lots, nevertheless, it represents a vast amount of unnecessary waste which must be reflected in land values and which in turn would handicap the city in its competition with others more scientifically arranged.

Money always represents carrying charges and the capitalization of this amount, based upon 200,000 population, indicates that every man, woman and child in Springfield, say forty years hence, would be represented by an annual carrying charge of $5.75, or, figured on the basis of families and assuming one family to every five people, each family would be represented by an annual charge of approximately twenty-five dollars.

It will be seen, therefore, that although the chief end in view in planning streets is to provide adequate and convenient traffic ways and an economical use of land, not the least to be achieved in this respect is the saving of money to city dwellers.

Control of the Subdivision of Land

The City Plan Commission can therefore perform no more important service to the community than by acting as a "watch-dog" regarding the future platting of land in and around the city.

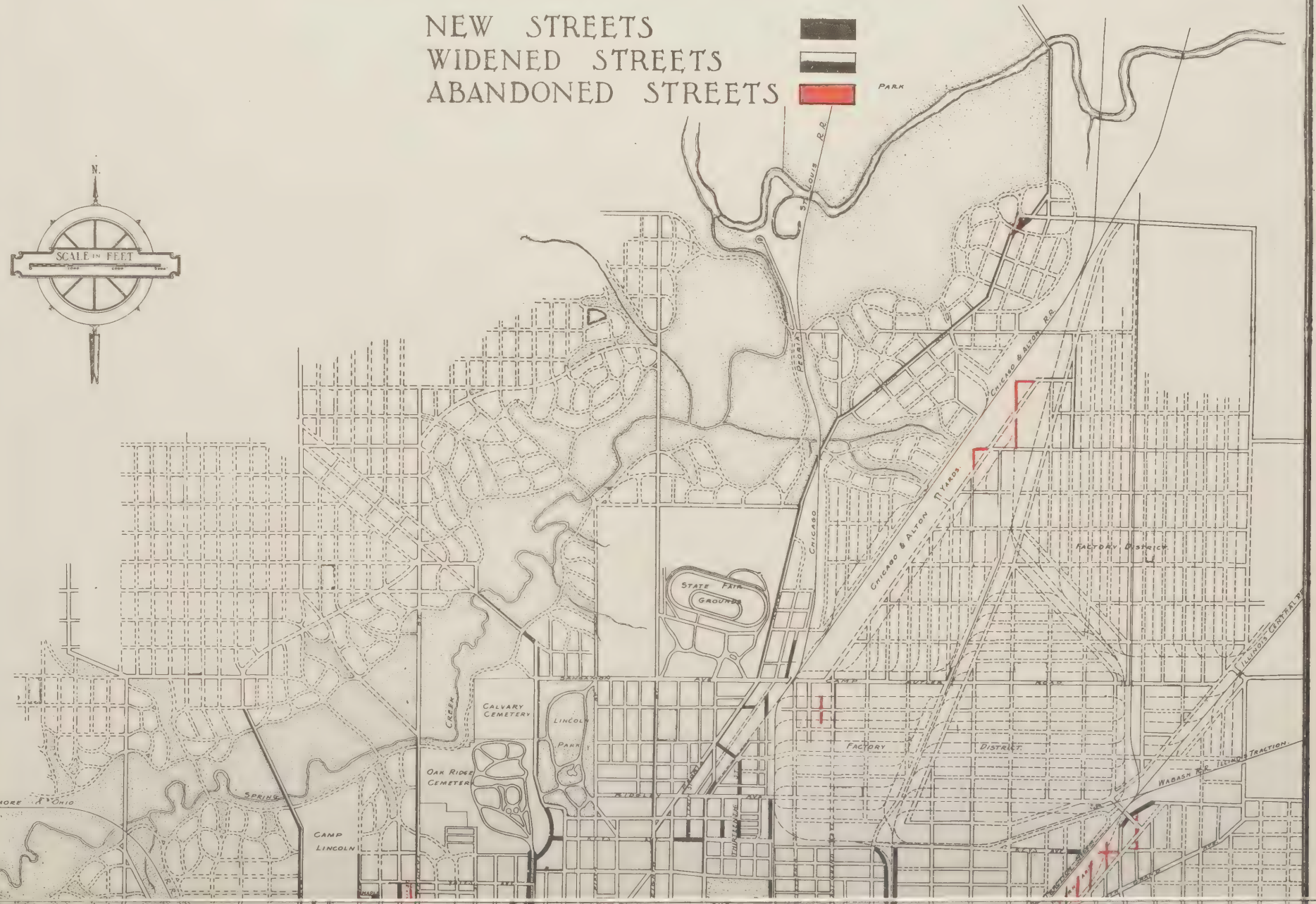
In this respect the Commission is aided by House Bill No. 306, approved by the Illinois Legislature June 24, 1921, which provides under Section 3 that:

"No map or plat of any subdivision presented for record, affecting land within the corporate limits of any city, village or incorporated town which has adopted heretofore or shall adopt hereafter an official plan in the manner prescribed in this Act, or in contiguous territory outside of and distant not more than one and one half miles from such limits and not included in any city, village or incorporated town, shall be entitled to record or shall be valid unless the subdivision thereon shown, shall provide for streets, alleys, and public grounds in conformity with any requirements applicable thereto of such official plan."

Realizing, as we do, the importance of considering such a city plan as this as a flexible thing which should be looked upon as a general guide only in steering the structural upbuilding of the city, we recommend that certain regulations for the plotting of land be required. We believe that once it is understood by the citizens of Springfield that the real policy of this plan is to work the greatest good to the greatest number, that little opposition will be found on the part of property owners in conforming to its basic recommendations.

THE SPRINGFIELD PLAN

STREET WIDENINGS & CORRECTIONS



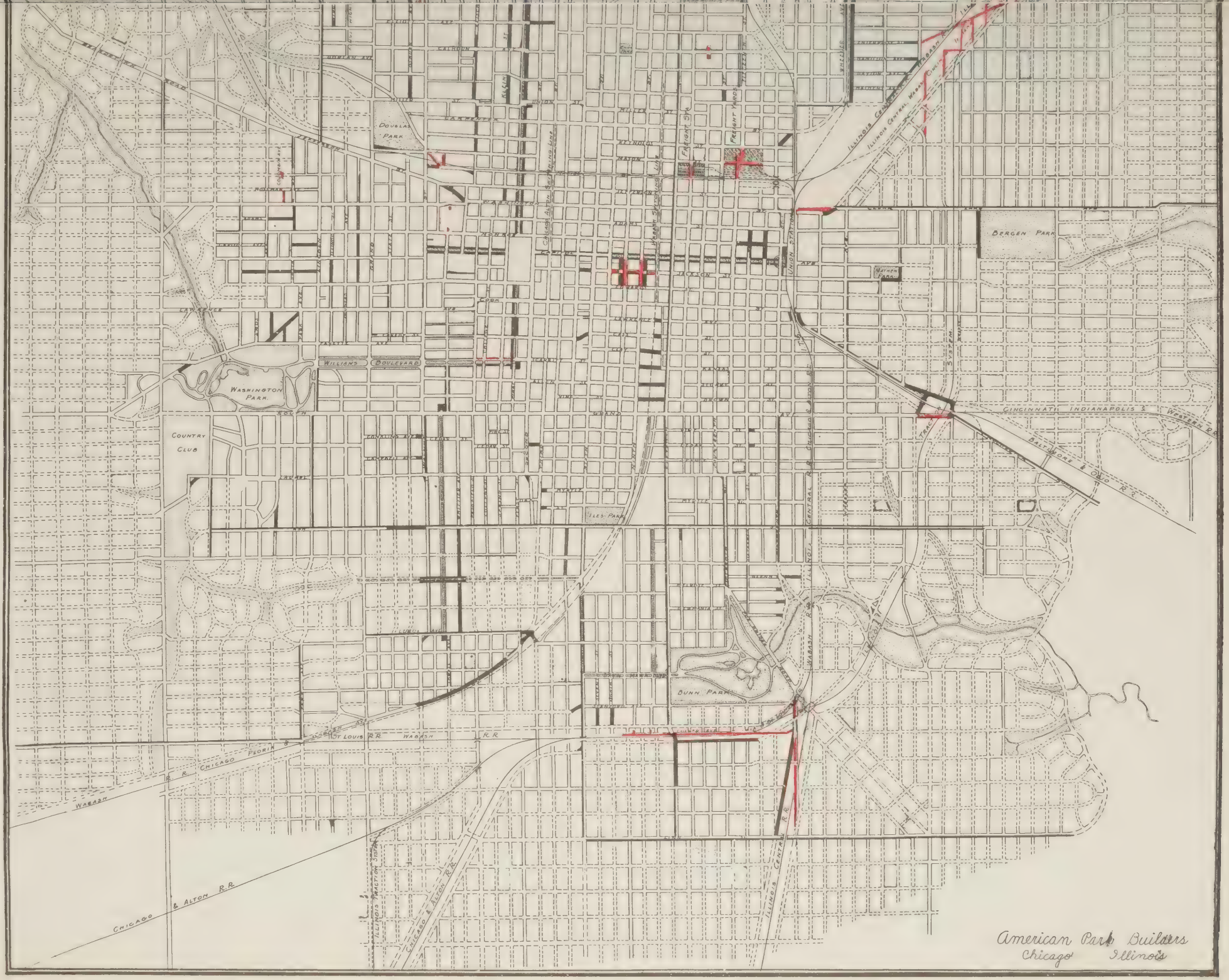

DOUBLAS PARK
WASHINGTON PARK
WILLIAMS BOULEVARD
COUNTRY CLUB
BERGEN PARK
MATHEN PARK
ILES PARK
BUNN PARK
ILLINOIS CENTRAL R.R.
CINCINNATI INDIANAPOLIS & WESTERN R.R.
BALTIMORE & OHIO R.R.
ST LOUIS R.R.
CHICAGO PEORIA & ST LOUIS R.R.
WABASH R.R.
CHICAGO & ALTON R.R.
ILLINOIS TRACTION SYSTEM
American Park Builders
Chicago Illinois

CHART 10

It is suggested that the following rules be adopted concerning the future subdivision of land:

Rules for the Subdivision of Land

Preliminary:

Parties seeking to subdivide land: 1. Shall file preliminary plat showing the property as proposed to be subdivided, and its location with respect to existing streets and property lines. Show all streets or highways bounding, abutting or approaching the property within 400 feet of any point of the property.

2. The plat must show relative elevations by contours with respect to the city datum of not more than five foot intervals, must show existing and proposed elevations of street corners, size of lots, location of proposed streets, alleys and parkings and the location of existing sewer and water mains adjoining or through the property.

3. Commission will indicate tentative approval or request certain changes within 30 days, or may reject entirely if plan is out of harmony with the program of the Planning Commission for the territory involved.

Final:

4. Property owners shall then proceed to stake the property as nearly as practicable to the sketch plan, as submitted or as modified by the Commission.

5. Final plat shall be presented for approval within six months of tentative approval, and must be approved or rejected within 30 days.

5-A. Plats shall be on brown detail paper, mounted on cloth 17 x 22 inches. Scale shall be not larger than 1 inch to 40 feet, nor smaller than 1 inch to 200 ft. If more than one sheet is required, the title, description of property, surveyor's certificate, owner's certificate, dedication of streets and alleys, etc. shall be on the first sheet, and no part of the plat shall appear on the first sheet. A small scale index plat showing the boundary of the portions appearing on each sheet shall appear on the first sheet. Each sheet shall be marked with the title of the subdivision, owner, scale, date filed, and the statement "This is sheet number ..... of a series of ..... sheets. Brown line prints from a Van Dyke negative mounted on muslin will be accepted if clear and distinct.

5-B. Platting shall provide for continuity of streets approaching it and shall not be so platted as to make the use of any adjoining property impractical or uneconomical.

6. Plat must show: length and direction of all boundary lines of property; lots and blocks, and must show clearly all streets, alleys and public grounds, and must carry a conveyance by the owners of these streets, alleys, parks and parkways to the public.

7. When curved streets are used, the plat must show the radius, degree of curve and central angle of all curves, except where a curve of 100 feet or less is used to cut back a lot corner (and effects only one lot) for better turn, it will be sufficient to show only the radius and main chord. Length and direction of all main chords shall be shown.

8. When a change of curvature occurs along the boundary of a lot, the distance from the lot corner to the point of such change shall be shown.

9. Where street intersections or junctions occur, the length and direction of the sub

chord from the beginning and end of the curve or curves intersecting or joining to the point of intersection or junction shall be shown.

10. The plat shall show the proposed elevation of all street intersections and of all high and low points in the profile of the streets, and shall show the gradient of all streets or portions thereof, when such gradient is greater than 3 per centum.

11. Monuments consisting of 4-inch square stone or concrete posts not less than 3 feet long shall be placed at all corners of the property, at all corners of blocks, at all intersections of principal back lot lines with the street line and at all angles or changes in direction of back lot lines and street lines. When curved streets are used monuments shall be placed in the property line on each side of the street, opposite all points of beginning, ending, or change of curvature. The distance from the center line of the street shall be shown for all monuments placed in the property line.

12. The plat shall carry a surveyor's certificate stating that he did the platting at the direction of the owner, attesting its accuracy and that monuments are in at all points designated on the plan, and at all points required by these regulations.

13. The plat shall carry an owner's certificate stating that he has caused the ground to be platted as shown, and that he is the owner of the land.

14. Owner must file a bond that he will grade all streets to the grades he has indicated on the plat within a period of 2 years, providing that if he does not do so the Commission may contract for the work and levy against the owner's bond, the property, or both, for payment.

Minor Street Corrections

Fortunately, there are comparatively few corrections of existing streets needed in Springfield. Wherever corrections are suggested they are shown to have a bearing upon the entire structure of the greater city and are not recommended purely from the standpoint of local needs. Chart No. 10 shows a number of such proposed corrections.

Jackson Street is shown extended between Fifth and Sixth Streets. This improvement should be undertaken to give better circulation of traffic in the neighborhood of the Capitol and to supplement the approach thereto by Capitol Avenue. Unless undertaken shortly this improvement is in danger of being forestalled by the erection of new buildings.

Cass Street is shown connected with Canedy, which in turn would be widened between First and Pasfield. This would make an important thoroughfare connection with Fayette Avenue past Washington Park and out of town to the west.

Jefferson Street is shown connected with Washington by a diagonal.

Klein Street would be extended to make connections with Grand Avenue and Washington Street.

Reisch Street is extended through to the south connecting with Mason Street.

Osburn Avenue is extended to connect with Miller Street on the south and Yates Avenue on the north.

First Street would be carried around on a curve to connect with the northern extension of Third street.

With the proposed railroad changes Keys Avenue can be extended easterly, widened

and joined with Watch Avenue and carried out to the proposed diagonal through the factory district to the northeast.

An important connection is shown between Reynolds Street and Wheeler Avenue at Nineteenth Street, which in turn would be extended north through the factory district.

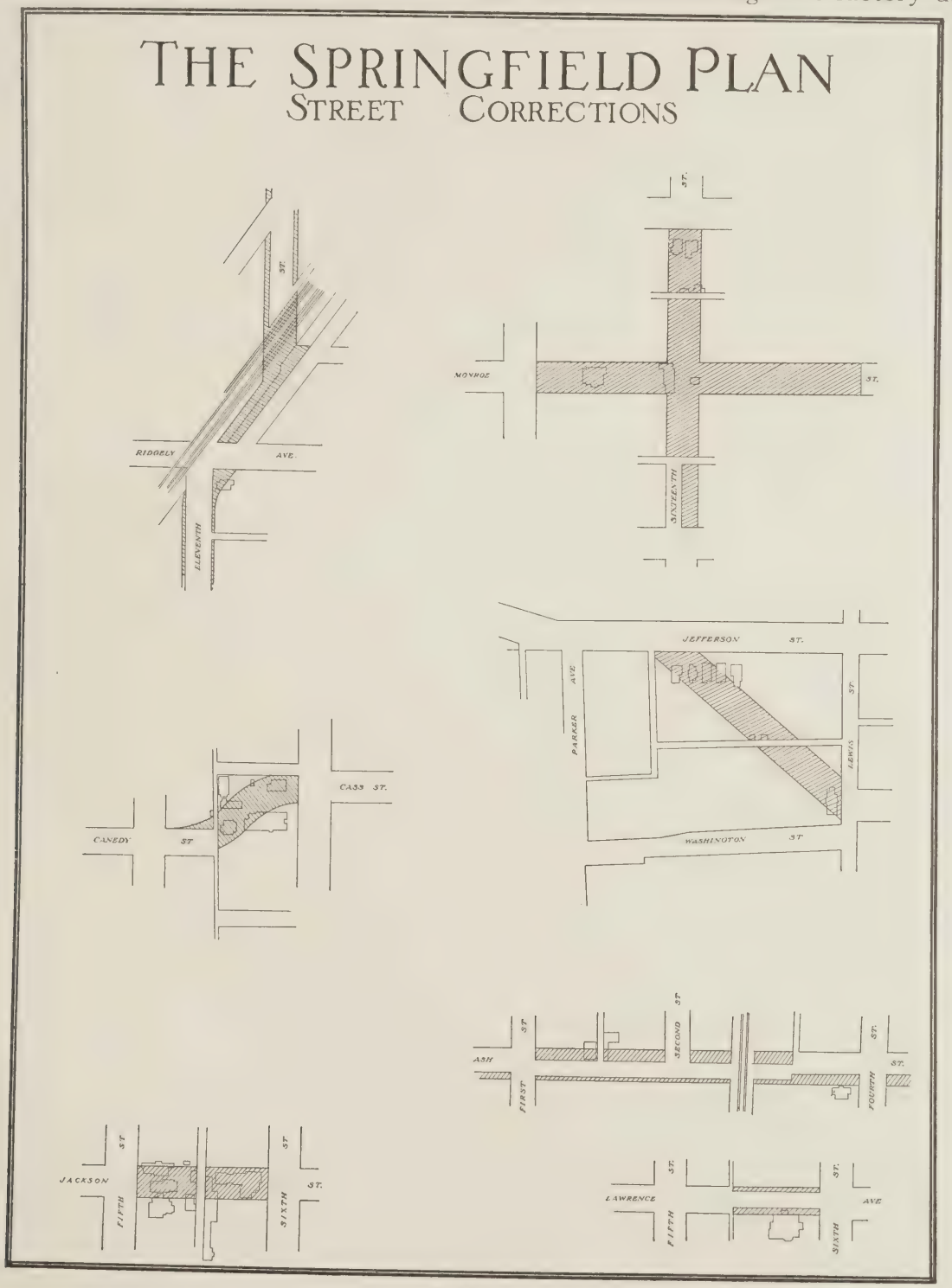


CHART 11

Lawrence, Cass, Clay, Scarritt, Allen and Vine Streets would be extended east to meet corresponding thoroughfares east of the Wabash shops.

Sixteenth and Seventeenth Streets would be prolonged to Adams Street.

It is suggested that Clear Lake Road be vacated between Nineteenth and Twentieth Streets and combined with Washington Street by a connection east of Twentieth Street.

Locust, Whittier, English, Illinois, West and other minor streets would according to the plan be extended to make satisfactory connections.

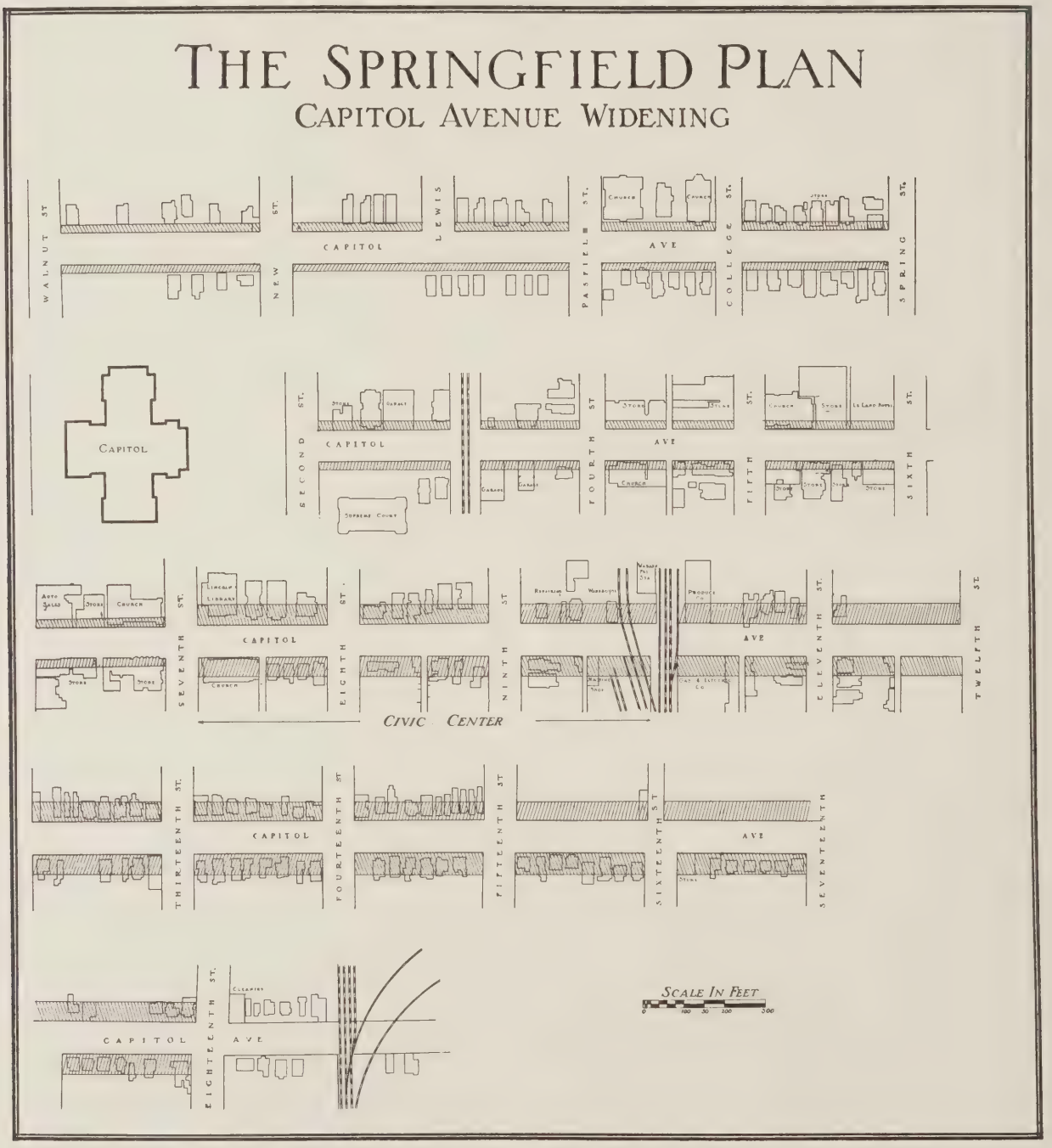


CHART 12

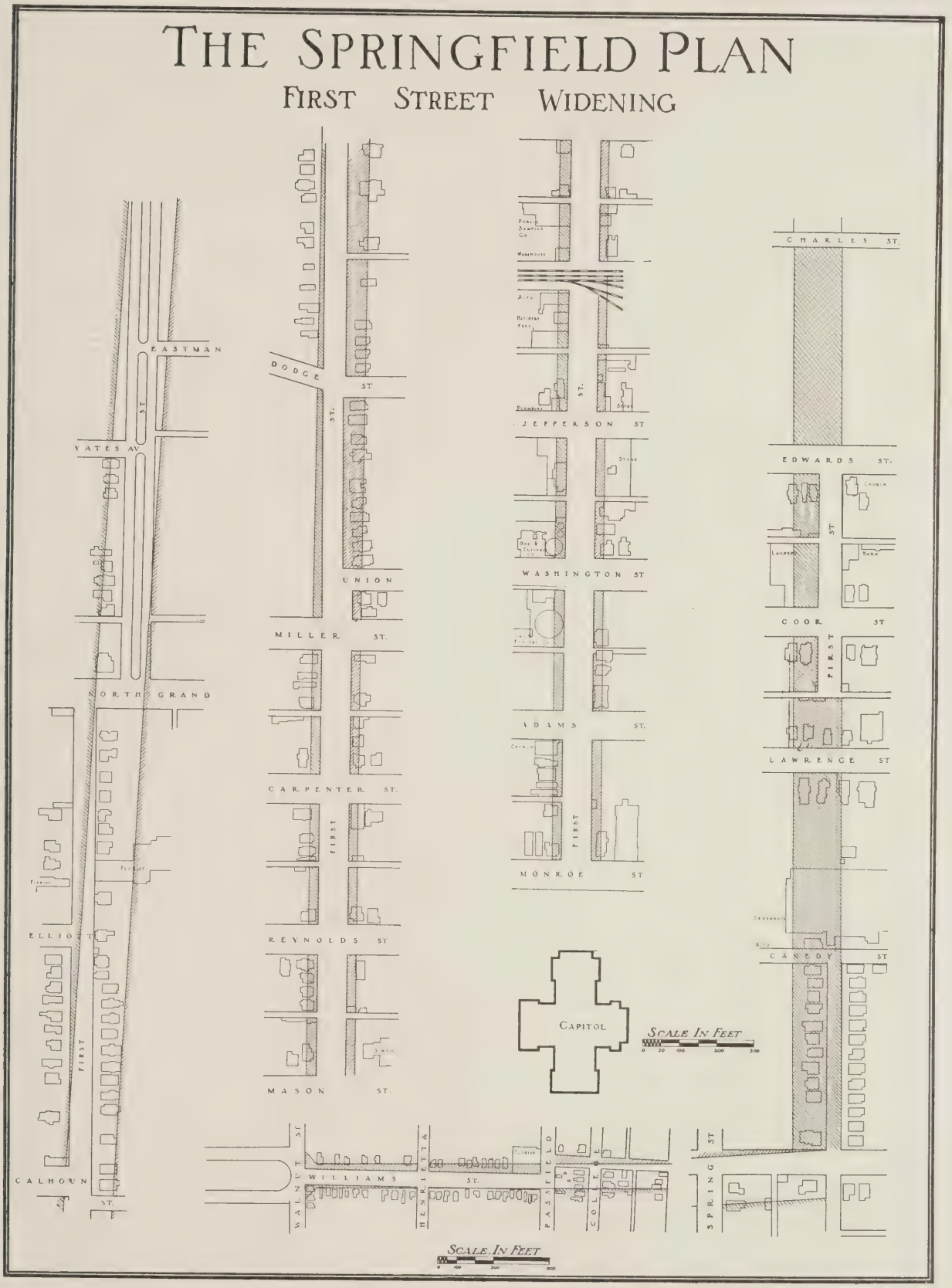

THE SPRINGFIELD PLAN
FIRST STREET WIDENING
EASTMAN
YATES AV
NORTH GRAND
ELLIOTT
CALHOUN
FIRST
ST
DODGE
UNION
MILLER ST.
CARPENTER ST.
REYNOLDS ST
MASON ST.
WASHINGTON ST
ADAMS ST.
MONROE ST
JEFFERSON ST
CHARLES ST.
EDWARDS ST.
COOK ST
LAWRENCE ST
CANEDY ST
CAPITOL
SCALE IN FEET
WILLIAMS ST.
WALNUT ST
HENRIETTA
PASFIELD
COLLEGE
SPRING ST
SCALE IN FEET

CHART 13

Capitol Avenue and First Street Widening

It is recommended that Capitol Avenue be widened to one hundred eighty feet from the proposed union station site to Seventh Street, and to one hundred twenty feet from this point to the Capitol.

It is further recommended that First Street be widened over its entire length from the Capitol to Oak Ridge Cemetery and from the Capitol south to Scarritt Street to one hundred thirty feet.

Pavement Widths in the Downtown Section

We have recommended in a separate report that in new paving operations the pavement width of Washington Street from Second to Tenth Street, and Fifth Street from Monroe to Madison be made fifty-six feet; that Capitol Avenue pavement be forty-six feet, and that Jefferson from Second to Tenth Street be forty-eight feet in width.

First Street approach to Capitol

We would suggest that in future cases of street rehabilitation pavement widths of fifty-six feet be secured, if possible, on all streets on which there will be double car lines. This will give room for parking cars along the curbs and for one line of vehicles to move without obstruction on each side of the car tracks. On streets containing one car line forty-six feet between curbs should be maintained, and on streets containing no car lines at least thirty-six feet.

An important point in the consideration of street widths is the radii of curbs at intersections. No small amount of congestion is caused by sharp corners, thereby forcing larger cars and trucks to take to the center of the street in making turns. In Milwaukee, Wisconsin, an ordinance requires that the length of radius be equal to the shortest distance from curb to property line and should in no case be less than fifteen feet. The setback of building lines has an important bearing upon this subject as it determines the range of visibility.

Unquestionably the greatest danger in automobile operation exists in the outlying residential sections where cars are apt to move at greater speed. Usually single family residences are surrounded by yards, giving ample setback to enable unobstructed views across the corners. Corner stores and apartment houses, however, are apt to build up to the property line, thereby shutting off the view and bringing about dangerous situations. Setback from front property lines as provided in the zoning ordinance is important in this connection.

Furnishings of the Street

The street is most intimately associated with all phases of city life and its arrangement and furnishings have no small part in influencing the city's standing and desirability.

It is essential that the streets should be more than mere traffic ways made passable in order that people may reach their places of business from their homes, or in order to carry the vehicular traffic necessary to the city's operation.

Like all other parts of the city, the street is apt to be built erratically and without program. Paving, lighting, planting and general ornamentation are apt to vary according to the ideas of individual property holders or successive city administrations. The street system when viewed as a whole often presents a very heterogeneous and unsatisfactory aspect.

Not a small part of the discomfort incident to the use of streets is due to the constant change in types of pavement and their inappropriateness. Various kinds of paving should be selected to fit certain types of streets. It stands to reason that streets subjected to heavy traffic, such as those around the freight yards, warehouse districts, and in the central business section, should be built of such materials and in such manner as to best meet this particular condition, while streets in the residential section, serving only to accommodate comparatively light traffic, should be paved accordingly.

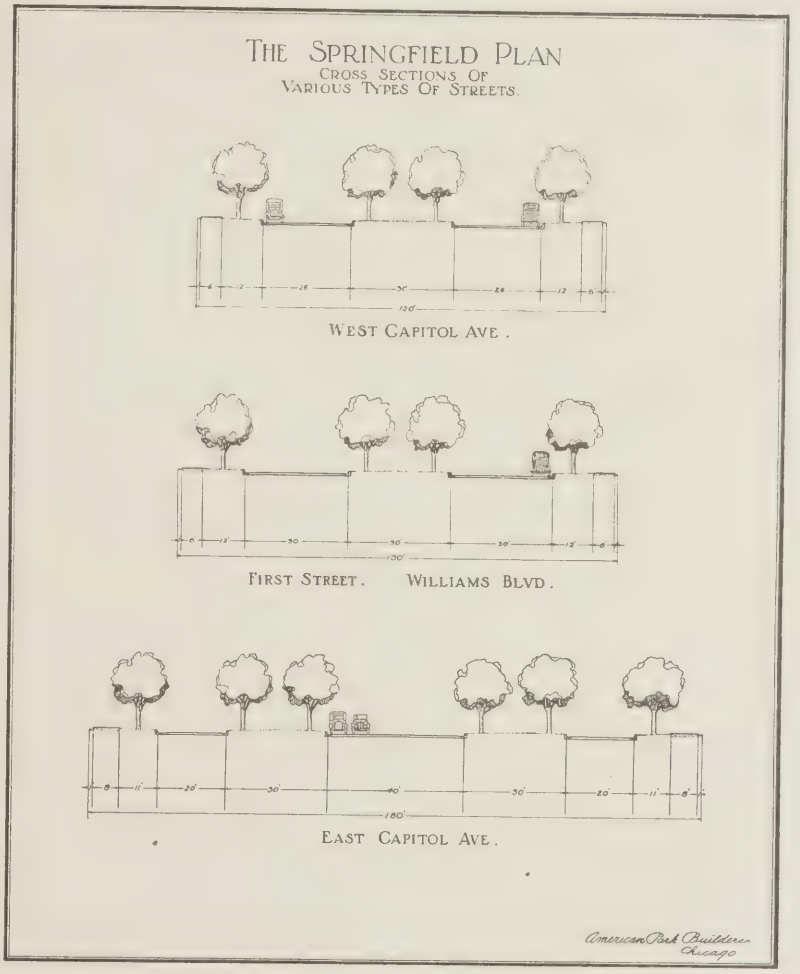


CHART 9

Asphaltic concrete pavements have proved very satisfactory in residential districts and on park driveways. These can be laid by municipal forces at a considerable saving under ordinary contract prices. These pavements are sanitary, easily kept clean, are resilient and noiseless and have established a reputation for withstanding for long periods present day traffic.

Vitrified brick, granite block, and wood block, properly laid on suitable foundations possibly are best for heavy traffic thoroughfares, where the character of use remains fairly constant.

It is desirable that streets be improved uniformly over their entire length and not be subjected to repeated changes in types of paving, lighting, etc.

Lighting

While details such as street lighting do not come strictly within the province of city planning, some general policy should be adopted and kept in mind regarding this very important element of street furnishing. Styles in lighting will unquestionably change from time to time, but street lighting of some sort will always be necessary.

The science of street lighting has progressed rapidly within the last decade. Not long ago we had to be content with an occasional gas light at street corners. Then came the overhead arc, blinding in its brilliancy and seeming to make intervening spots even darker.

It has at last come to be realized that the function of the street light is to illuminate the pavement and sidewalk without the lighting unit itself being overconspicuous, or without causing the distress brought about by glare. Frequently spaced units of comparatively small candle power are used, and lights are softened by globes or shades to present a continuously illuminated street without successive dark spots.

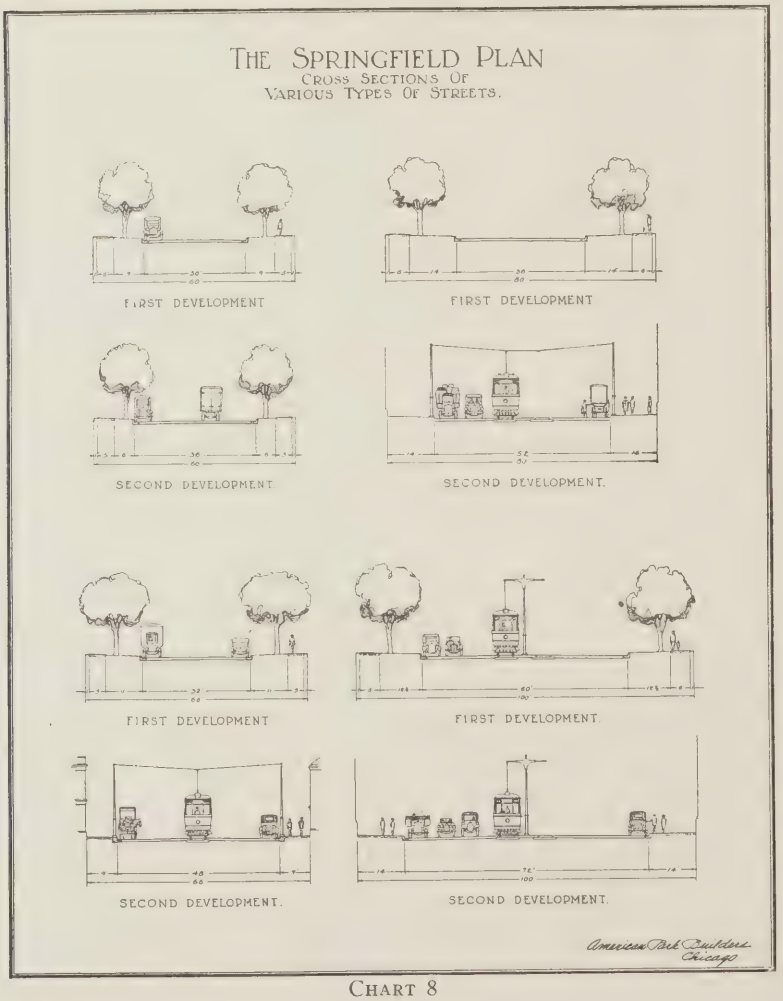


CHART 8

There remains to design the lamp standards that they may have architectural beauty. Much has been accomplished along this line in recent years and the mechanical draftsman employed by cast iron foundries has been supplanted by trained architects, who have designed lamp standards in metal, concrete, and other materials of pleasing lines and proportions. In this way, lighting schemes have been made distinctive and in every way pleasing.

Street Tree Planting

Perhaps the most abused and neglected of all street furnishings are the street trees. They too, as a rule, have been installed and cared for according to a multitude of individual whims and fancies. No two streets, rarely two blocks in succession, have been planted uniformly as to size, species, or spacing.

Once planted, trees are subjected to every imaginable abuse and neglect and to what often is still worse, the ill advised care and attention on the part of abutting property owners and commercial tree doctors. This, together with the artificial conditions to which they are subjected, gives a striking example of the tenacity with which trees cling to life.

Should of a sudden the street trees of Springfield die or be devastated by insects or fungous diseases, as has been true in some of the eastern cities, there would at once be raised a popular clamor which would cause city authorities to go to any expense for their protection. Fortunately, no such contingency has arisen, but nevertheless there is a great need in Springfield today for better care of street trees.

There are few species of trees suitable for street purposes. Soft wood trees are unsatisfactory on account of their short life, their tendency to break and splinter during storms, and because they are more subject to the attacks of borers and other insect pests. Soft maples, poplars, ailanthus, black locust, and catalpas come under this head. Other trees, satisfactory for lawn planting, are unsuitable for street purposes on account of their shape, habits of growth, and peculiar susceptibility to smoke, gas, lack of water, and other handicaps to which street trees are subjected. Birch, beech and most conifers, valuable in general landscape treatment, are unsuitable for the street. In Springfield the list of satisfactory trees is still further curtailed because of the great amount of soft coal used.

Forest-like aspect of Springfield from Capitol Dome

A tree, to be suitable for street purposes, should have the proper shape, spread and symmetry of growth to furnish shade and to present a symmetrical vista along the street. Unless tress are spaced properly they dwarf each other by overcrowding and can not grow into the fine specimens that would otherwise result. In order to produce the best effect, a single species or variety should, where possible, be planted along the entire length of the street.

On most of the streets of Springfield fine specimens of suitable species are found. These should be retained. Good specimens of objectionable species should also be retained for the time being, if they do not crowd better trees. Decayed and inferior specimens should be removed and replaced with nursery grown specimens as large in size as can be conveniently planted. Thus, gradually, over a period of years all objectionable species can be removed and the streets made to take on a satisfactory appearance. Streets in new additions should be planted with smaller trees, but with careful consideration as to kind, spacing and manner of planting.

This all calls for the establishment of a central control. Satisfactory work of a city wide nature can never be secured by individual effort on the part of property owners. In some cities such control is vested in the park board; in others in a special department headed by the city forester, and in still others it is absorbed in the department of streets and public buildings.

For many reasons the park board is best fitted to undertake the work. It is closely allied with other park operations. The park department, as a usual thing, has an organization for forestry work and possesses the special tools and equipment necessary. The executive head of the park department should be, and usually is, experienced in arboriculture as well as in the other branches of landscape gardening. The trees on the city's streets really constitute a continuation of the parking system and therefore may be fittingly included under this department.

We recommend, therefore, that an ordinance be carefully drawn and passed by the City Council giving to the park department the care and control of the street trees within the city. Private owners should not be allowed to plant, cut, prune, or otherwise interfere with street trees unless by special permit issued by this department, which should in all cases insure the carrying out of the work in accordance with a well formulated program.

Comparatively little money will be necessary to inaugurate and carry on this undertaking, although a certain appropriation will be required annually. The department should start a municipal nursery for the propagation of suitable trees and should undertake and continue the work of rehabilitation by gradual stages year after year.

The good results that can be brought about by such a program will in a few years become strikingly apparent.

General Street Ornamentation

There are many ways in which streets can be made more attractive. The doing away with overhead wires and signs, the placing of statuary, fountains, garden seats and other garden furnishings at strategic points, the cleaning and planting of waste spaces at street intersections—all may be made to contribute to the city's beauty.

Far too little attention is paid to such matters generally, and in consequence streets are suffered to become dull and unsightly and entirely out of keeping with the homes, office buildings, churches, schools, parks and other standard features of the modern city. In these features care is used in both planning and maintenance. The framing thereto—the streets, should receive like attention.

An example of tree butchery

The doing away with overhead wires is receiving attention in nearly all progressive cities. There can be little said in favor of allowing overhead wires to clutter and make our streets unsightly and dangerous. Permits for aerial construction in outlying districts, where underground lines would be too costly, should be of temporary nature only and should provide for the change to underground lines after a term of years.

Lighting circuits should be placed underground in the built-up sections without delay and as fast as possible should be followed by telegraph and telephone lines.

While the initial cost for underground construction is comparatively high, it is more than offset by the saving in maintenance, uninterrupted service during storms, danger by broken wires and by the improved appearance of the city.

Fortunately, advanced ideas in advertising are calling for more real art and less discordant vulgarity in the way of sign boards that once dominated the views along our streets. Well designed window displays are taking the place of large suspended signs, and in the increasing demand for attractive advertising the artist is again coming to his own.

This trend in public sentiment is a fortunate thing for our cities, as regulation of street advertising by law is well nigh impossible, save where property values or human lives are endangered. Acting under this theory, however, many cities have adopted ordinances regulating overhanging signs and have prohibited the encroachment of sidewalk space by sign standards.

Freed of overhead wires and signs, with a uniform lighting system and well cared for trees, the street takes on an aspect of orderliness which is only in keeping with the progressive city of today. These are but evidences of good housekeeping and should constitute a part of every civic program.

There remains to be carried out judicious ornamentation such as the placing of statuary, fountains and garden furniture, the planting of little triangles and odd spaces with shrubbery and flowers, and the improving of street vistas in various ways.

The streets of a city present a never ending opportunity for such efforts in the cause of civic art. Philanthropic individuals, improvement and art clubs, and the various civic bodies herein have a fertile field for work.

RAILROADS

IF SPRINGFIELD is to build along the best and most economical lines, every advantage afforded by railroads entering the city at present or which may be built into the city in the future must be fully capitalized. By the same token, every disadvantage to the city brought about by bad arrangement should be overcome without delay.

There is little reason for holding to the hide-bound idea that railroad lines are inflexible and not subject to alteration. This idea has perhaps arisen from the fact that railroads were early on the ground and to a large extent influenced the location, as well as the later development, of the city. This close relationship between the railroads and the city may account for the rather complacent attitude often taken towards the many evils growing out of the unfortunate placing of lines and the bad effects arising therefrom as the city assumes larger proportions.

In reality, it is not a superhuman task to change the location of a railroad line, and if this change will bring about a convenience to city dwellers, a saving in expense to shippers, a greater protection to human life, a saving in operation costs to the railroad, and a more attractive and desirable city in which to live, and especially if these results can be figured to offset the expense of the readjustment, such benefits should receive most careful consideration and be carried out without delay.

It is the purpose of this report to show first, the condition in which Springfield finds herself in regard to railroad lines, and secondly, to outline practical improvements in the general arrangement of these lines that will insure the above results.

Springfield is served by six steam roads and one electric line. Three of these roads, the Chicago & Alton, the Illinois Central and the Wabash, traverse the city in a general north and south direction, paralleling each other at close intervals. Three railroads pass through the city in a general east and west direction, coming together at Madison Street, and separating to the east and west.

To a large extent, these roads occupy city streets, the Chicago & Alton—Third Street; the Wabash—Tenth Street, and the Illinois Central, Nineteenth and Twentieth Streets. The C. P. & St. L. occupies Fifteenth and Nineteenth Streets to Madison, and Madison Street is occupied by railroads from Logan to Nineteenth Streets. In addition to this, the I. T. S. Electric Line operates its cars through the city on public streets. Considerable building frontage is involved along these railroad streets, bringing about an unusually bad situation, and the fact that the railroads to such a large extent occupy public streets possibly explains their delinquency in bringing about grade crossing separation.

Considering the small mileage of railroad lines in the city, there are an unusual number of dangerous grade crossings and a marked depreciating effect on property values. The present arrangement makes for a multiplicity of stations, freight houses and yards, which are scattered over the city promiscuously, and the baneful effect of smoke, dust and noise is distributed widely throughout the city. There has been a tendency to build factories along these lines in a way to bring about an unhappy mixture of industrial and residential areas.

In the case of the Chicago & Alton, the road is carried within close proximity to the Capitol, greatly injuring the outlook from this building and cutting off the State Group from the business section.

The inconvenience and danger brought about by the large number of grade crossings are indeed serious. There are at present one hundred and thirty-nine main line grade crossings within the plotted area of Springfield. Of these only forty-three are guarded and the guards on these crossings average only fourteen hours of service each day. At many of the crossings the guards are withdrawn at night, even during the evening rush hours.

Street cars cross railroad tracks in Springfield 4,277 times a day, according to the present schedule. Delays to street car service of five minutes or over total as high as one hundred sixty-eight minutes a day. In this count only instances were noted where cars were blocked in violation of city ordinances, and only cars actually delayed were counted. Other cars delayed on the same line were not included, but it is frequently necessary to drop one or more intervals in the car schedule during the day by reason of this situation.

During the period elapsing between 1908 and 1922 sixty-four persons were killed on grade crossings in Springfield. Thirty-five of these fatalities occurrred on the Chicago & Alton and sixteen on the Wabash. It is a significant fact that the majority of accidents have occurred on guarded crossings at which the guard was on duty at the time of the accident. Indeed, twenty-two of the sixty-four fatal accidents occurred on three crossings all of which were guarded. This clearly demonstrates that due to the unsolvable human problem the guarding of grade crossings by gates and flagmen does not insure against accidents.

Crossing of Alton and B & O lines in heart of the city

The cutting up of Springfield by numerous railroad lines not only makes for danger and inconvenience in the use of streets, which is reflected in the delays of street cars and to a much greater extent to motor cars, horse-drawn vehicles, and pedestrians—delays which cause an incalculable loss of money during a period of years, but it brings about a loss in property damage which increases with great rapidity year by year as the city grows larger and land therein becomes relatively more valuable. The shutting off of development north and south demonstrates this in connection with the lines on Madison Street and again it is shown as reflected in values of property lying east of the Wabash Road and separated from the center of the city by a wall of shops south of Capitol Avenue.

It would seem a pity, therefore, to continue inflicting upon Springfield the dangers and

handicaps existing, which will grow more serious as time goes on, when a cure can be effected without in any wise interfering with transcontinental traffic or local service to the city.

Franchises:

With the exception of the franchise pertaining to the Wabash location on Tenth Street, which is missing from the city records, all franchises allowing the use of city

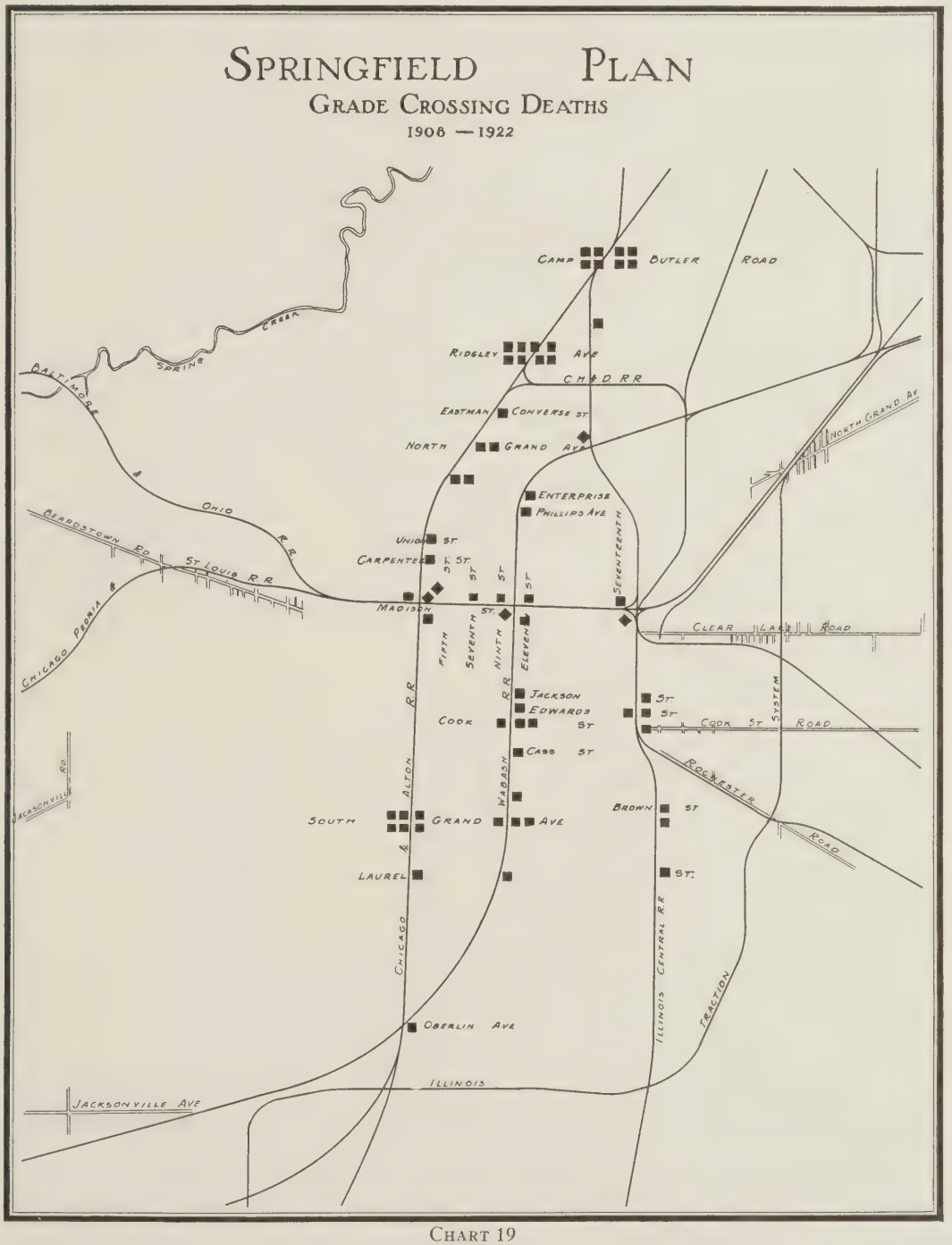


CHART 19

Sixty-four persons were killed at grade crossings between 1908 and 1922

streets by railroads provide that carriage ways must be maintained on both sides of the tracks, except along the Chicago & Alton, where a road shall be placed on one side only. It is provided that safe and convenient crossings be built and maintained at all streets and alleys and that drainage be taken care of by the railroad company. In the case of ordinances based upon these franchises, speed is limited to six miles an hour for freight and ten miles for passenger trains, and, in addition to this, streets shall be blocked for not more than five minutes.

Only a cursory inspection of conditions is needed to see that these provisions are very generally ignored. As has been set forth above, only forty-three of the one hundred and thirty-nine grade crossings are guarded. Driveways are not provided along the rights-of-way; and in the operation of trains little or no attention is paid to speed restrictions imposed by the ordinances. It would seem, therefore, from the standpoint of franchise, that the position of the railroads on the public streets of Springfield is at this time untenable, while, on the other hand, should these provisions be enforced to the letter, an expense would accrue to the railroads which would make the combination of lines into single groups and the elevation thereof a wise move from the standpoint of economy.

Service:

On the whole, train service, both freight and passenger, in Springfield is fairly good. Some discrimination has been shown in the matter of freight rates, but this bids fair to be cured by the State Railway Commission.

From the standpoint of convenience as regards freight shipments, the situation in Springfield has little to commend it. As is usual where there is a multiplicity of freight yards and stations, there is delay in placing cars and in their location by consignees. The city has reached the size where there can no longer be expected the personal attention given in small towns, while there is, on the other hand, a lack of efficiency which undoubtedly would not obtain could these yards be combined in larger units.

The various passenger stations, while conveniently located with respect to the business center, are small and not of such character as to lend attractiveness nor dignity to the city. As usual, the development around these stations has resulted in a series of poorer class business sections on land which is otherwise strategically located to bring larger returns. Due to the scattered locations of these stations and to the inconvenient access by street cars, strangers in the city are apt to experience no little confusion.

Any plan for the improvement of railroads in Springfield should look forward to a much larger city and at the same time provide needed benefits for the city of today. It should aim toward the consolidation of railroad facilities, both as to freight and passenger traffic, should minimize trackage, do away with grade crossings, eliminate duplication of service, the back-switching to passenger stations, and should provide centralized yards for the breaking up, storage and classification of freight. It should provide for the removal of through lines as far distant from the heart of the city and the better residential sections as practical without bringing about inconvenience. Economies from the standpoint of railroad operation and use by shippers should be one of the primary objects.

SPRINGFIELD PLAN

EXISTING RAILROAD PLAN

SHOWING PRESENT INDUSTRIES

INTERLOCKING TOWERS
CROSSING WATCHMEN
CROSSING BELLS
CROSSING GATES
SUBWAYS

Chicago Peoria
C.O. Freight
C.A. Station
Union Station
C.P. St.L. Frt.
Wabash Station
Wabash Frt.
C & A Sh
I.C. Ya
Cincinnati Hamilton
Dayton R.R.
Baltimore & Ohio South
Western R.R.
System
Wabash Yard
Alton R.R.
Chicago
Illinois Central R.R.
Traction
Illinois
Wabash R.R.
Chicago & Alton R.R.

CHART 15

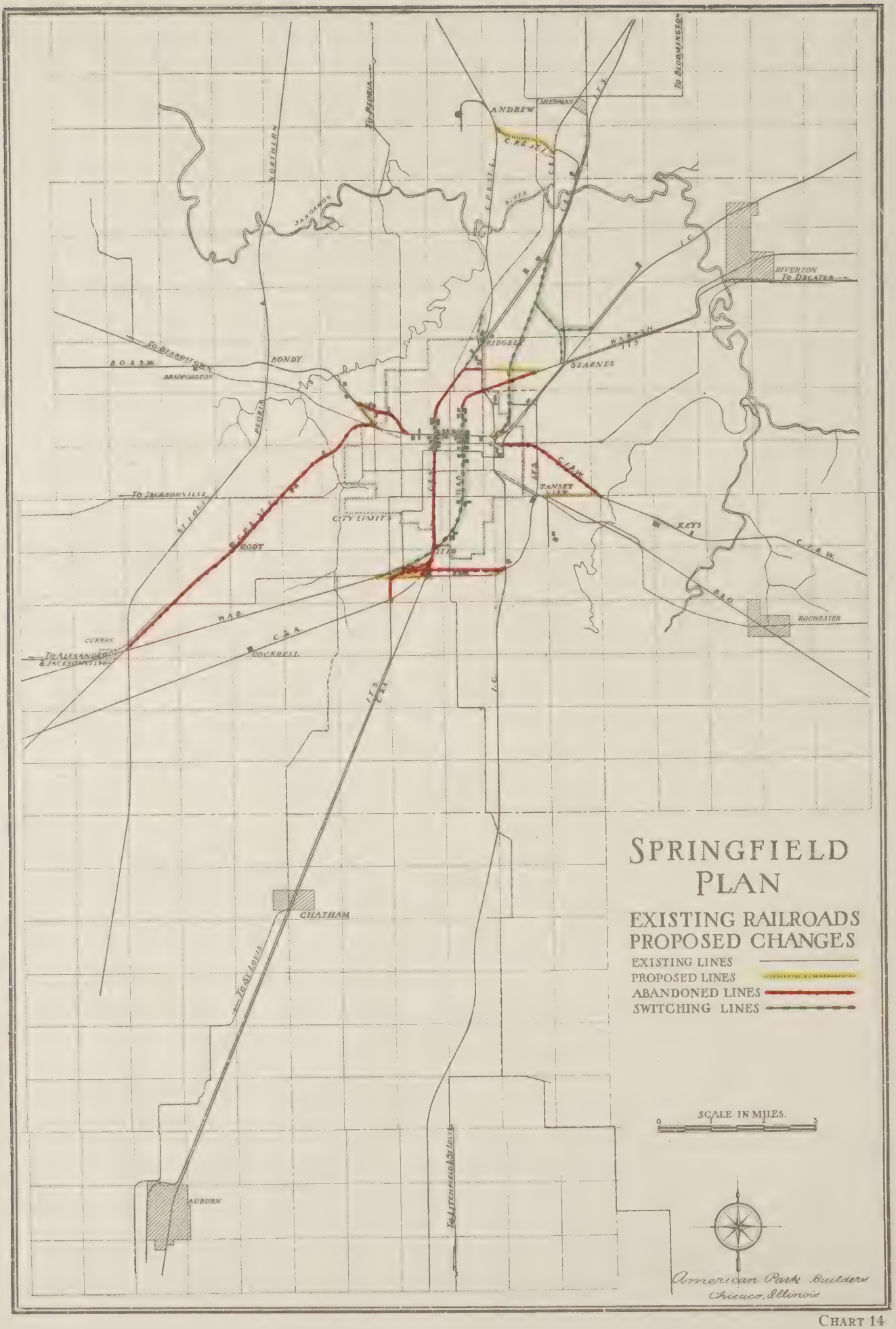

SPRINGFIELD
PLAN
EXISTING RAILROADS
PROPOSED CHANGES
EXISTING LINES
PROPOSED LINES
ABANDONED LINES
SWITCHING LINES
SCALE IN MILES
0
2
3
ANDREW
SHERMAN
TO BLOOMINGTON
TO PEORIA
NORTHERN
JACKSONVILLE
RIVERTON
TO DECATUR
TO BLANDSTOWN
B. O. & S. W.
BRADFORDTON
BONDY
PEORIA
RIDGELY
STARNES
WABASH
TO JACKSONVILLE
ST. LOUIS
CITY LIMITS
TANSEY
KEYS
C. P. & W.
B. & O.
ROCHESTER
CURRAN
TO ALEXANDER & JACKSONVILLE
COCKRELL
C. & A.
I. C.
CHATHAM
TO ST. LOUIS
AUBURN
TO LITCHFIELD & ST. LOUIS
American Park Builders
Chicago, Illinois

CHART 14

Springfield's Railroad Stations add little to the beauty and dignity of the city

Alternate Suggestions:

As is common in the study of railroad conditions in cities, many solutions to this ever present and serious problem have been advanced from time to time, and, as commonly true, many of these suggestions are worthy of serious consideration. For the most part, however, their authors have considered the problem from a single viewpoint without regard to its relationship with the comprehensive scheme for the greater city, and measured this way such schemes many times fall short of achieving their desired purpose.

Always the depression of railroad tracks meets with a greater measure of popular approval than does that of track elevation. The outstanding argument against track depression is, of course, the excessive cost. Track depression carried out on a large scale in Springfield and involving the various lines on the present rights-of-way would be prohibitive in this respect. The cost of depressing lines after consolidation into one or two groups would probably involve more expense than the railroads, particularly at this stage of their economic history, even with the city's aid could finance.

The cost of depressing rail lines through the existing city is increased tremendously over what would be true in outlying territory on account of the interference with public service such as water and sewer pipes, heating service and gas mains. Added to this is the extra cost of embankment protection, drainage, and the difficulty in making necessary switching connections with existing industries.

Consolidation Along the Wabash:

At first inspection the practical scheme might seem to be the consolidation of the Wabash and the Chicago & Alton lines, using the present Wabash right-of-way.

A more obvious reason for this change would be to remove the Chicago & Alton from the immediate environs of the Capitol and to provide a location for the passenger station for the two roads at Capitol Avenue, using this thoroughfare which centers on the Capitol building as the gateway to the city.

Such an arrangement, however, leaves much to be desired. The scheme would go only part way and would fall far short of dealing with the railroads in the broad manner desired in a comprehensive city plan of this nature.

There are also the Illinois Central and the Illinois Traction Electric Line entering and leaving the city in the same general direction. It is doubtful if satisfactory arguments

can be brought to bear which would result in the moving of the Illinois Central to the Wabash right-of-way, even though this would be desirable from the city's standpoint.

Unquestionably, the tracks along the present Wabash right-of-way would have to be altered as to elevation in order to do away with grade crossings. This road passes through a thickly settled portion of the city, and elevation, by far the less expensive method of grade crossing separation, would in this case be costly indeed. The tracks would have to be raised sufficiently so that no depression of streets would be incurred, or there would result serious interference with underground public utilities, as well as damages to abutting property. In addition, there would be thrust through the center of the city a busy railroad group, having a tendency to build up a wall of factories and cutting off a great built up section to the east.

It is doubtful if the Illinois Central would consider joining in this group, inasmuch as it would add two miles to its line, while should it remain as at present there would, within a few years, occur the necessity of in turn elevating this railroad, thereby causing a duplication of expense and bringing about parallel elevations in close proximity to each other.

No satisfactory arrangement of a union passenger station can be worked out under such a plan, for, although the Alton would be removed from the immediate vicinity of the Capitol, the railroad group would still be close enough to it and the center of the city to interfere with any scheme for an approach to the Capitol sufficiently imposing to meet the needs of a greater Springfield. In addition, the location of a station at Tenth Street would necessitate the back-switching of passenger trains on the B. & O., C. I. & W. and Illinois Central Railroads.

East and West Lines:

Unquestionably, the location of railroad lines on Madison Street is unsatisfactory. Various projects have been set forth calling for the routing of the B. & O. around the city to the north or south. Trial lines have been platted and figured with the following results:

First: A belt line south of the city, starting at Sugar Creek, thence extending west and combining the C. & A., Wabash and C. P. & St. L. belt line, thence following the main line of the Wabash to a point well west of the city, thence north, joining with the Chicago & Northwestern and continuing on this right-of-way to meet the present line of the B. & O. west of Springfield. Incidentally, this line would form the proposed route for the C. I. & W. from the southeast to a point where it would connect with the Illinois Central leading north into the city.

The disadvantages of such an arrangement would be that it would require approximately three and one-half miles extra distance on the B. & O. for through traffic, besides increasing the distance of the C. I. & W. to either its present station or to the proposed union passenger station at Capitol Avenue and Nineteenth Street. Such a plan would impose prohibitive grades on the C. I. & W. It would require two and one-fourth miles of back switching for the B. & O. trains to the proposed union passenger station and a still greater distance to the present B. & O. station. Under the best conditions approximately eight miles of extra distance would be necessitated in the operation of all B. & O. trains stopping at Springfield.

The second alternative suggested is to carry the B. & O. to the north of the city, following the present right-of-way to Madison and Nineteenth Streets, thence north over the C. P. & St. L. to a point north of its intersection with the Peoria Road, thence southwest along Spring Creek to again connect with the present right-of-way.

This would add approximately three and one-fourth miles to the present distance, although the construction of this line, not counting trackage rights along the C. P. & St. L., would entail a saving of something like $100,000 under the proposed elevation along Madison Street, later described. The additional cost however, of operating trains over this added distance, figured on a five percent capitalization, would amount to over $800,000 based on the present operating schedule. This cost would be increased proportionally as traffic over this road increases.

The Recommended Plan of Railroad Arrangement:

The plan as recommended and as shown on accompanying Charts 14 and 17 may be briefly described as follows:

1. Reroute the Chicago & Alton from the C. P. & St. L. line at Ridgely over the C. P. & St. L. right-of-way to East Grand Avenue tower at Madison and Nineteenth Streets, thence south over the Illinois Central right-of-way to Bunn Park, thence west along the present right-of-way of the Chicago & Alton industrial track to the Chicago & Alton main line, approximately one-half mile south of Iles Junction, leaving the present line of the Chicago & Alton for switching purposes only from Sangamon Avenue to Ridgely and from Carpenter Street to a point between Monroe and Capitol Avenue.

2. Reroute the Wabash over the Illinois Central from the crossing at Starnes south to Bunn Park, thence over the Chicago & Alton industrial right-of-way and a short extension westerly to its present line near Amos Avenue prolonged. Retain for switching purposes from this junction north to Enos Avenue.

3. Continue the C. P. & St. L. as at present to Madison and Nineteenth Streets, thence over the Illinois Central and Chicago & Alton industrial right-of-way to the Wabash, thence over the Wabash to Curran, doing away with this line over Madison Street, and from a point west of the city to Curran.

4. Abolish the C. I. & W. right-of-way from a point where it intersects with South Grand Avenue prolonged and near Sugar Creek bridge. Carry new line directly west to the B. & O., thence over the B. & O. to the proposed union passenger and freight stations further described.

5. Retain the B. & O. on its present right-of-way over Madison Street as far as Walnut Street, thence over the C. P. & St. L. to Amos Street, connecting with existing line from this point with the new cut-off.

6. Reroute the I. T. S. to east and south of city in combination with main railroad group, retaining present Monroe Street station for the time being for local trains. Consolidate the I. T. S. freight cut-off with the steam roads east and west from Bunn Park to the Kansas City line of the Chicago & Alton.

7. Retain the Illinois Central as at present, except doing away with back switching over Madison Street to the present station.

Elevations:

All lines on the Illinois Central right-of-way would be elevated from Nineteenth and Madison Streets south to a point approximately three-fourths of a mile south of Laurel Street. This would take care of the main group north and south, including, as above described, the Wabash and the Chicago & Alton.

There would be necessitated an elevation on the C. P. & St. L. and Peoria and Northern branch of the Chicago & Alton and Illinois Central for approximately 1,500 feet, serving as an incline to the intersection at Madison and Nineteenth Streets; also an incline on the Baltimore & Ohio to connect with the Illinois Central at Nineteenth and Cook Streets.

The Baltimore & Ohio would be elevated along Madison Street from Nineteenth and Washington to Walnut Street.

In addition to the above, it is recommended that all new lines be elevated sufficiently to enable future streets to be placed underneath the tracks without the necessity of later rearranging grades of railroads.

Classification Yards:

Classification yards would be placed along the Illinois Central between Starnes and East Grand Avenue to accommodate four lines, namely: the C. I. & W., the Wabash, Baltimore & Ohio and Illinois Central.

In addition to this, the present Chicago & Alton yards at Ridgely would be enlarged to care for future business on this road and also provide room for shops, taking the place of those now located at East Grand Avenue and at Third and Madison Streets.

These two classification yards would be inter-connected as follows: At the north end by the Springfield Terminal Railroad and at the south end by the C. P. & St. L.; from the north end of the Chicago & Alton yards to the south end of the Illinois Central yards by the Peoria & Northern line, and from the south end of the Chicago & Alton yards to the north end of the Illinois Central yards by a proposed combined line of the C. P. & St. L., C. I. & W., and Wabash already existing.

Wabash Freight House

Much saving in the handling of freight would take place by consolidating these small and scattered units

The above yards would furnish storage for approximately 12,000 cars a day and would provide break-up and classification facilities for all roads entering Springfield. They would serve as feeders to the factory district and would segregate all break-up switching at a point outside of the present city.

Study for proposed Union Passenger Station at Capitol Avenue and Eighteenth Street

Consolidated Freight Terminal:

While, according to the above described plan, all roads would still be able to connect with and use their present freight terminals without inconvenience, the plan provides for a consolidated freight terminal extending between Eleventh and Thirteenth Streets and between Madison and Mason Streets; a consolidated teaming yard between Fourteenth and Seventeenth Streets and between Madison and Reynolds Streets; and for a storage and sorting yard lying along the north side of Madison Street between Fourteenth and Seventeenth Streets.

This would provide a capacity for 176 cars daily at the freight house, or a daily capacity of approximately 2,000 tons, besides 475 cars, capacity at the teaming yards.

This freight terminal would be conveniently located for the use of all railroads and readily accessible to the classification yards. It would in turn be within easy hauling distance of the commercial district and would function well with this district as enlarged according to the zoning plans.

Union Passenger Station:

A passenger station serving all steam railroads as well as the I. T. S. Electric Line would be located at Capitol Avenue and Eighteenth Street. By this location all backswitching of passenger trains would be done away with, as would all interference by railroad crossings and junctions.

SPRINGFIELD PLAN

PROPOSED ELEVATION OF B. & O. RAILROAD GROUP

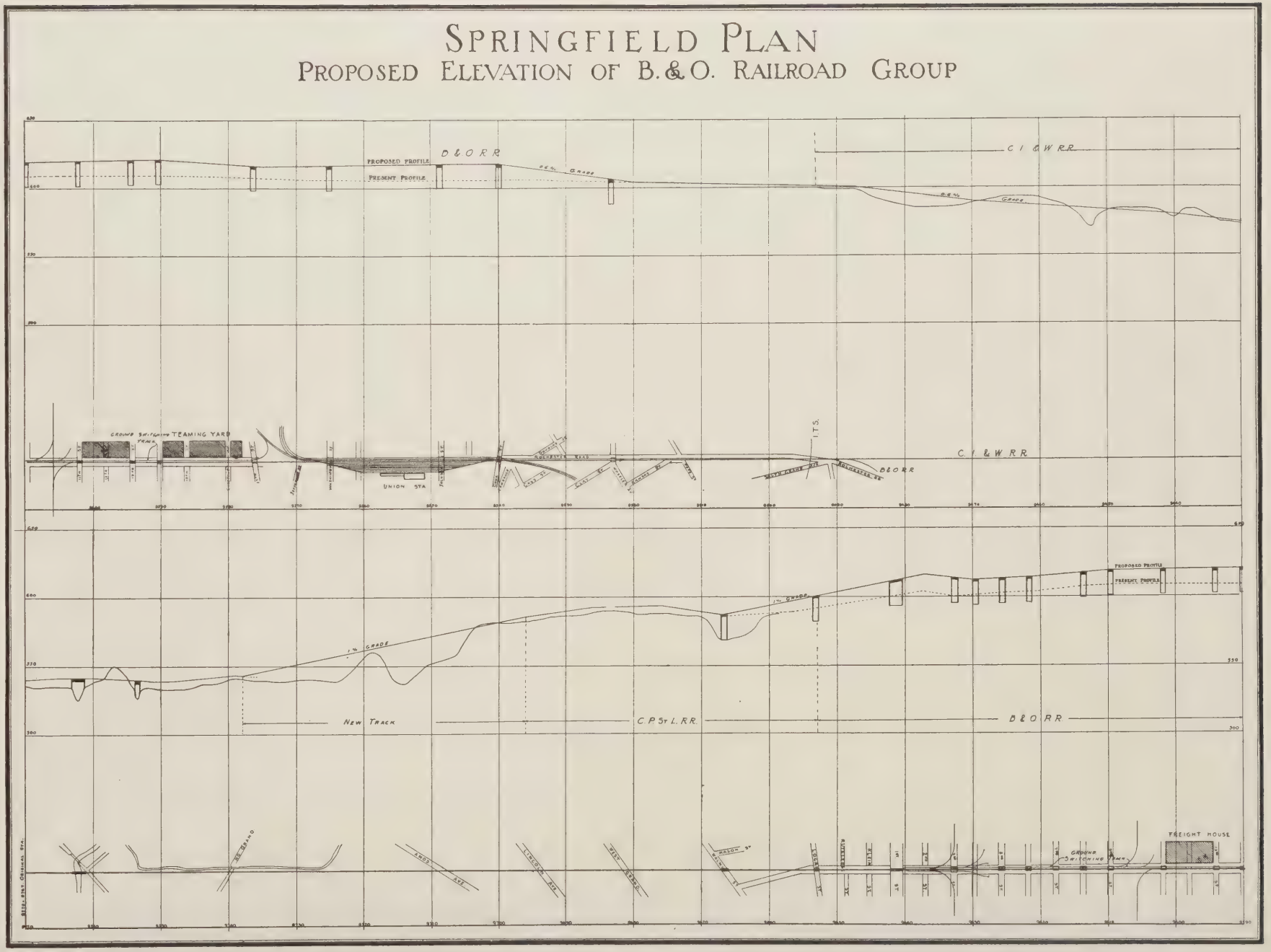


CHART 21

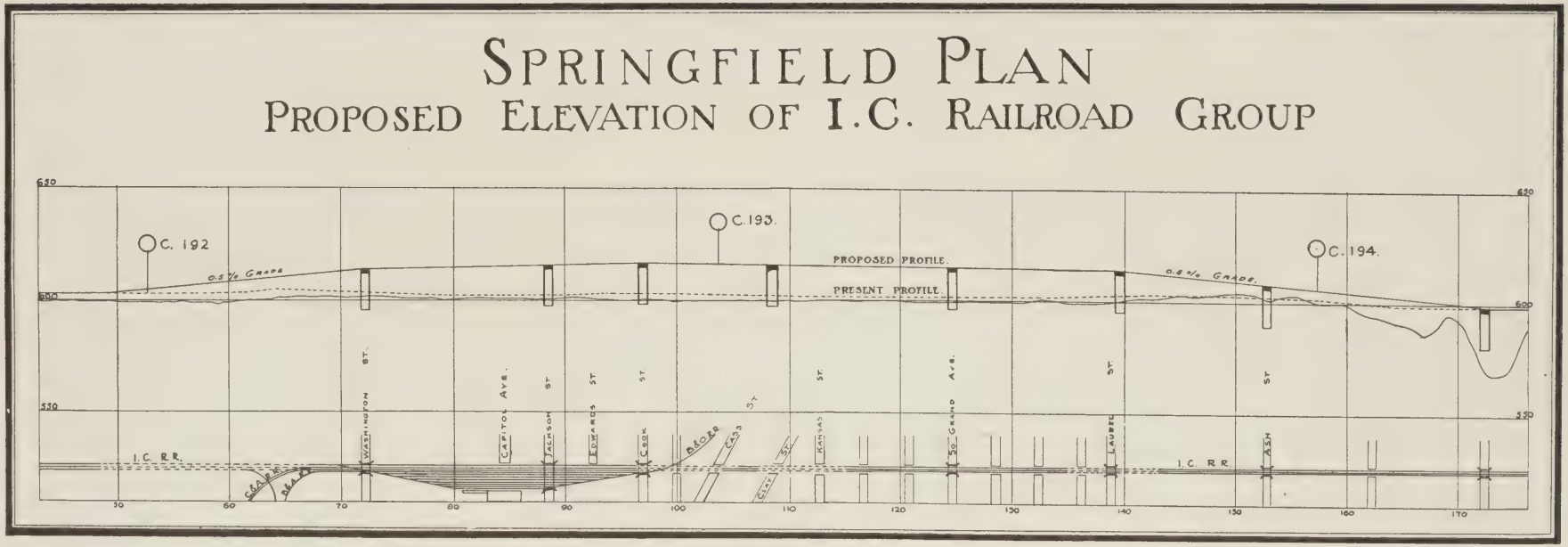


CHART 22

By combining Springfield's railroads into two groups and by elevating these through the city, nine miles of main track would be removed within the present city limits and ninety-two grade crossings would be eliminated

Benefits:

Benefits from a physical standpoint to be derived from the above changes will lie chiefly in freeing the city from a multiplexity of railroad lines, especially those for through traffic. Instead of six detached railroads there would be two groups, one to accommodate the north and south lines and one the lines passing east and west.

Some of the chief benefits of the plan would be as follows:

Nine miles of main line track would be removed from within the present city limits and twenty-two miles of track within the area affected by the railroad program.

Two important streets would be released for public use, namely: Third and Tenth.

The heavy electric trains of the I. T. S. Railroad would be routed around the city, thereby relieving the streets of this unnecessary traffic.

Ninety-two grade crossings would be eliminated, while twenty-four other crossings now on main lines would be used for switching only.

Large areas of the city now cut off or circumscribed by railroad tracks would be freed from these barriers.

Parallel elevations north and south through the city would be prevented.

Scattered freight and teaming yards would be vacated, allowing these areas to be used for higher class development.

The environs of the Capitol and companion buildings would be freed from the smoke, noise and disturbance due to the proximity of railroads. A more convenient arrangement would be obtained in the handling of freight, especially that destined to the proposed factory district.

The Wabash Railroad yards cut off a great residential section from the city's center

There would be dispensed with the necessity of back switching passenger trains to stations.

A location would be made possible for the proposed union passenger station not too far from the business district nor from the center of population and in such a position as to make an approach to the center of the city and to the State Capitol Group sufficiently imposing to be in keeping with its purpose as the front door to the Capital City.

In short, we believe that such an arrangement as described would be of untold benefit to the city from the standpoint, first, of greater convenience and safety to the people of Springfield; second, in freeing the city from objectionable features and thereby enhancing the value of real estate, and, finally, from the standpoint of wholesale beautification.

As compared with the present arrangement of railroads or with the projects for improvement before discussed, this plan insures tremendous savings in cost both to the rail-

road companies and to the citizens of Springfield. These savings as applied to the railroads are represented principally by doing away with grade crossing guards and by the reduction in maintenance and operating costs due largely to reduction of track mileage, and as applied to the people of Springfield is represented by the stabilizing of property values and the saving of time and human lives.

We estimate that an annual saving of $261,000 would accrue to the railroad companies by reason of these changes.

Three dangerous, unprotected crossings of railroads and one unprotected junction would be dispensed with.

Four protected crossings of railroads with their towers would be eliminated.

The plan would bring about a saving by the elimination of one tower at present, and five if all present needed towers were installed. This is equivalent to an annual saving of $37,500. It is estimated that aside from this a saving of $17,100 a year would be effected in train operation and track maintenance.

At least forty percent of the transfer operations between company yards would be dispensed with and the operation of trains through the city would be greatly facilitated, due not only to the saving in mileage, but in providing unobstructed track. Not a little of this saving would be effected through doing away with unnecessary back switching to passenger stations, as is now true in the case of the Illinois Central, and to the unnecessary distance in reaching the station on the part of the C. I. & W.

The elimination of ninety-two grade crossings and the changing of twenty-four main line crossings to switching crossings would effect a saving of $206,400 a year. This is based on guarding main line crossings eighteen hours a day and switch line crossings nine hours a day.

The total amount of $261,000 thus saved represents approximately seventeen percent on the entire estimated cost of the work. It will be noted, however, that the above estimate of cost as pertaining to the guarding of grade crossings is extremely conservative. In all probability, long before Springfield attains a population of 200,000, the railroads will be forced to guard crossings throughout the entire day. The cost of guarding the one hundred thirty-nine present crossings, within the district treated, twenty-four hours a day would involve an annual expenditure of $363,000, and it may be safely assumed that if the railroads remain where they are many additional crossings will by that time be needed.

The following table shows savings effected by the plan under the headings of maintenance, operation and grade crossings as distributed among the several railroads.

Interlocking towers and transfers	Grade Crossings	Maintenance	Operation	Total
		$10,000	$36,200	Distributed
C. P. & St. L.	$23,700	7,700	−4,000	$34,000
C. & A.	33,500	5,600	−24,000	21,700
I. T. S.	7,900	.....	2,000	16,500
B. & O.	31,300	.....	.....	37,900
C. I. & W.	31,300	.....	13,000	50,900
I. C.	43,200	.....	14,500	64,300
Wabash	35,500	.....	−6,400	35,700
Totals	$206,400	$23,300	$31,300	$261,000

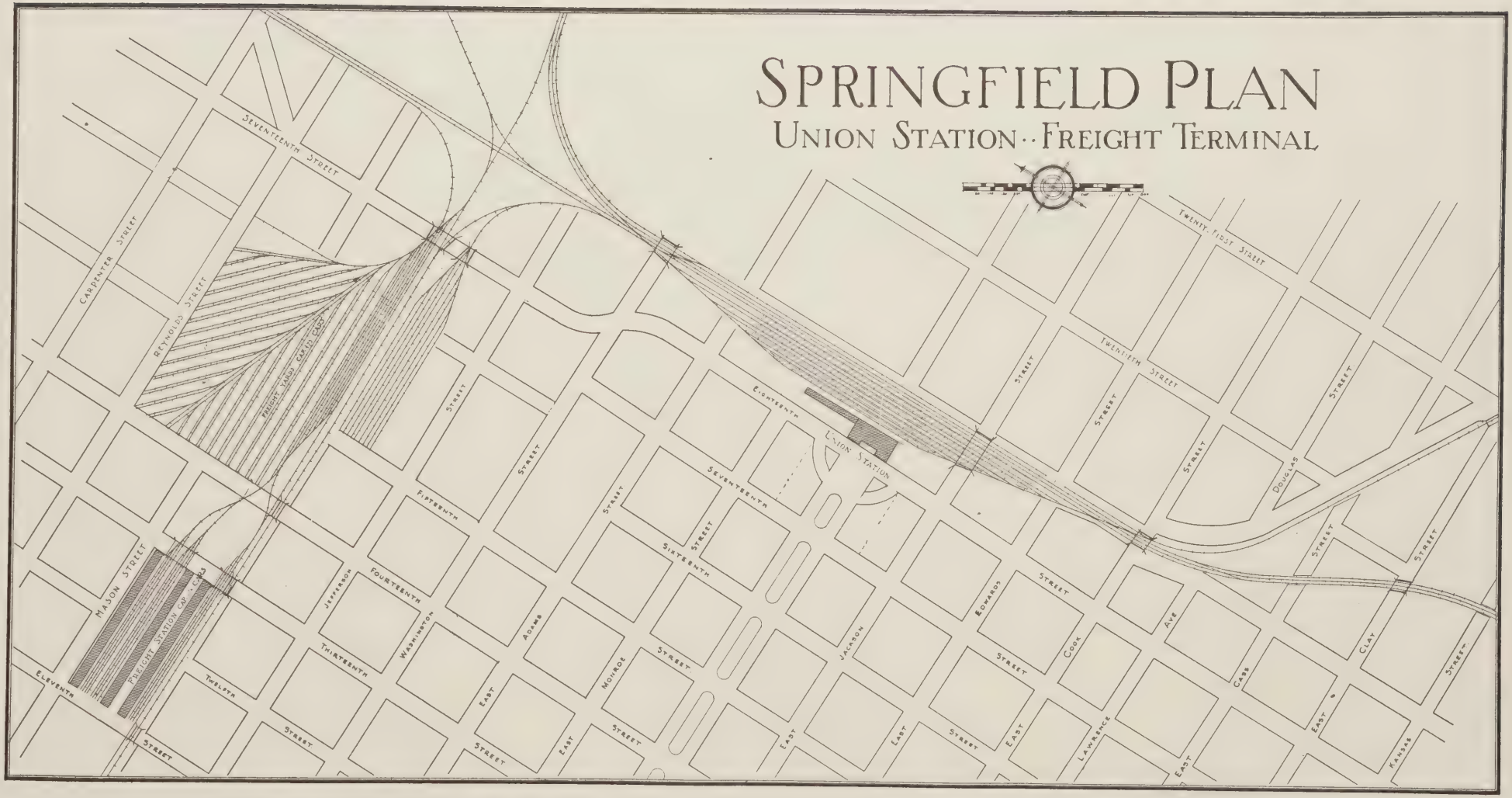


CHART 20—*Track Plan at proposed Union Station and Union Freight Terminal*

The above table is based on crossings protected eighteen hours a day on main lines and nine hours on switching lines, and on maintenance figures of class one railroads, which equals $1,400 a mile for way and structures.

Practically no change would be incurred by the B. & O. in trackage maintenance.

The C. I. & W. would save 1.8 miles of track and one mile of trackage rights.

The Wabash would have .55 miles of additional track, but less expensive maintenance.

According to the plan the C. P. & St. L. would save five and one-half miles of track maintenance, the C. & A. 4.95 miles of double track maintenance, and in addition thereto 5.82 miles of single track maintenance.

The I. T. S. would pay trackage rights to the steam roads instead of to the street railroad company, which would not materially affect operation costs.

The following table gives the comparative length in miles of each road under present and proposed routes:

	At Present	Under Proposed Plan	Added Length	Saving In Length
C. P. & St. L.	8.5	9.75	1.25	....
C. & A.	4.95	5.82	.87	....
I. T. S. Passenger	5.36	4.86	....	.5
I. T. S. Freight	Same	Same	Same	Same
B. & O.	1.37	1.43	.06	....
C. I. & W. Passenger	6.15	2.5	....	3.65
C. I. & W Freight	2.5	2.9	.04	....
I. C. Passenger	....	....	....	2.0
I. C. Freight	Same	Same	Same	Same
Wabash	6.15	6.7	.55	....

The following table shows the relative miles of lines under the present and proposed system:

Greater Springfield:

	Main	Switching Only	Elimi-nated	New Track	Elevated Track
Present	40.8	....	....	....	....
Proposed	18.8	8.16	18.5	4.77	5.2

Present City Lines:

Present	16.7	....	....	....	....
Proposed	6.8	4.3	5.2	....	4.2

The following table shows the relative number of grade crossings in the platted area of Springfield.

	Main Crossings Unguarded	Switching	Main Crossings Guarded	Total
Present	96	2	43	141
Proposed	..	24	25	49

Grade crossings eliminated—92.

Grade crossings eliminated except for switching—116.

Grade crossings eliminated by consolidation without elevation—50.

Grade crossings eliminated by elevation in addition to above—42.

The following table shows the number of grade crossings eliminated for each railroad, some of these, however, being common to two or more roads:

C. P. & St. L.	25
C. & A.	21
I. T. S.	5
B. & O.	32
C. I. & W.	23
I. C.	34
Wabash	26

Savings to the Community:

In addition to the above direct savings, which will more than finance the entire changes called for, there are two items which have to do with community loss, both of which are painfully obvious, but which are apt to be computed upon a sentimental basis only. These have to do with delays incident to grade crossings which, besides being annoying, spell actual loss in dollars and cents, and the second having to do with injuries, fatal and otherwise, to human beings.

In the first case it is impossible to estimate the actual loss, but the following analysis may be illuminating. As has been stated, street car delays aggregate one hundred sixty-eight minutes a day. It is estimated that there is a direct loss of thirty hours a day to people riding on Springfield street cars. It may be safely assumed that four times this number of hours is lost by delays to vehicles and pedestrians. Extending this at an average of thirty cents an hour there would be represented a loss of over $17,000 a year.

Sentimentally, human life cannot be measured in dollars and cents, but figured from the standpoint of an insurance company and taking into consideration the fact that there is an average of four deaths caused annually at railroad crossings in Springfield, we may assume as lost to the community an average earning power of at least $75.00 a month. Under present insurance rates it would cost approximately $50,000 a year to buy life annuity to take care of this amount.

Without, therefore, going into the estimated enhancement of property values which would, we believe, in itself pay for the entire railroad improvement program, it will be seen that a conservative saving of approximately $330,000 a year would be brought about. This capitalized at five percent amounts to $6,600,000.

Cost of Carrying Out the Proposed Plan:

The estimated cost of carrying out the railroad program is about $1,500,000, exclusive of new passenger station and freight yards. This is based on using old tracks relaid on new lines and grade, inasmuch as the difference in value between new and second-hand materials is chargeable to maintenance and renewal and only additional capitalization affects this study.

The Wabash yards and roundhouse have been omitted from these calculations. Should they be moved to a new location, as along the Illinois Central between Starnes and East Grand Avenue, the difference in land values would offset the cost of moving.

SPRINGFIELD PLAN
PROPOSED MAIN LINES
EXISTING LINES
ELEVATED LINES
NEW LINES
PEORIA RD.
RAILROAD YARDS
C.A.
C.P.&ST.L.
I.T.S.
RIDGELY
CAMP
BUTLER
RD.
BEARDSTOWN
RD.
I.C.
WAB
I.T.S.
STARNES
YARDS
NORTH
GRAND
AVE.
C.P.ST.L.
B&O
ST.
EAST GRAND AVE.
I.T.S.
I.C.
WAB
I.T.S.
RAILROAD
FRT STA.
WASHINGTON
ST.
U STA
I.T.S.FRT.
COOK
ST.
SOUTH
GRAND
AVE.
TANSY
C.I.&W.
B&O
WALNUT
SIXTH
ELEVENTH
EIGHTEENTH
ASH
ST.
I.C.
WAB.C.P.ST.L.
C.A.
I.T.S.
WAB.&C.P.ST.L.
WAB.C.P.ST.L.
C.A.
I.T.S.
TO ST LOUIS
C.A.
C.A.
I.C.
American Park Builders
Chicago Illinois

CHART 16

The new shops at Decatur make these at Springfield practically useless and enable the land to be sold or leased.

The cost of the new freight houses and team yards has also been omitted, inasmuch as present facilities of this nature will still be accessible to all lines after rerouting takes place. The proposed freight houses and yards can be built as maintenance and renewal, in units as needed, each line going to the new location as present facilities require replacement. As in the case of the Wabash shops, the sites of present freight yards can be sold or leased at high prices because of their central location, while the proposed freight terminals will be placed on less expensive land.

No account is taken of property damage in this estimate. This item would be minimized by using Nineteenth Street for the main north and south group. In the case of the contract with the Chicago & Alton Railroad the city is already under obligations to pay for this item and no contracts of this nature exist in connection with the other roads.

It is roughly estimated that the union passenger station, including station tracks, can be built at a cost of three-quarters of a million dollars, although this cost would be largely dependent upon the nature of the building.

The succeeding tables are based on trackage arrangement as follows:

Illinois Central from Starnes to East Grand Avenue—two tracks.

C. P. & St. L. from Camp Butler Road to East Grand Avenue—two tracks.

South belt or C. & A. industrial line—two tracks from Bunn Park to C. & A. main line and one track west.

Baltimore & Ohio—one track.

I. T. S. from Bunn Park to St. Louis line—one track.

Main group from Washington Street to Cook Street—four tracks, and from Cook Street to the junction at Bunn Park—three tracks.

It will be seen from the tables that the cost of the improvements will be as follows:

East and west group, including the Baltimore & Ohio and C. I. & W.—$459,200.

North and south group, including the Illinois Central, Wabash, Chicago & Alton and C. P. & St. L.—$964,080.

I. T. S. changes—$99,100,

or a total of $1,522,380.

Baltimore & Ohio Railroad

RECOMMENDED PLAN

East of Cook Street:

1 single track subway at Clay and Wheeler, 40-ft. span...	$ 20,000
1,800 ft. track taken up and relaid @ 50¢.....	900
1,200 yds. ballast @ $1.50.....	1,800
Excavation @ 50¢.....	3,850
	$ 26,550
15% overhead and contingencies.....	4,000
	$ 30,550

Washington to Walnut Street:

Excavation @ 50¢	$ 62,600
11 subways, two 30-ft. spans each 1 subway, three 40-ft. spans	185,000
Tearing up and replacing pavement and sidewalk	40,000
Track taken up and relaid	5,000
Ballast	7,500
	$300,100
15% overhead and contingencies	45,000
	$345,100

New Line:

Excavation @ 50¢	$ 37,500
Right-of-way, 10 acres @ $500	5,000
4,000 ft. track taken up and relaid	3,000
Pipe culvert	750
Ballast	3,000
	$ 49,250
15% overhead and contingencies	7,400
	$ 56,650
Total Madison Street line	$401,750

Subways at Walnut, Logan, First, Third, Fourth, Fifth, Sixth, Seventh, Ninth, Eleventh, Thirteenth, Fourteenth and Seventeenth Streets.

Alternate Line—B. & O. (North)

4.5 miles right-of-way @ $500 per acre	$ 27,500
4.3 miles of track taken up and relaid @ $3,600	15,480
0.2 miles new track	3,000
4.5 miles ballast @ $1.50 yd	10,125
Tower at junction C. P. & St. L.	6,000
Telegraph and signal apparatus	10,000
Bridges:	
1—Spring Creek, 60 ft. long	33,000
4 smaller creeks, 50 ft. long	54,600
3 branches, 30 ft. long	34,200
Grading—average 6 ft. high @ 40¢	52,850
	$246,755
15% overhead and contingencies	37,015
	$283,770

SPRINGFIELD PLAN
PROPOSED RAILROAD PLAN
EXISTING LINES
PROPOSED LINES
SWITCHING LINES
ELEVATED LINES
C.P.&ST.L.
PEORIA RD.
YARDS
RAILROAD
C.A.
ALTERNATE B.&O. LINE
BEARDSTOWN
RD.
RIDGELEY
CAMP
BUTLER
RD.
SPRINGFIELD TERMINAL
SPRINGFIELD TERMINAL
SPRINGFIELD TERMINAL
FACTORY DISTRICT
I.T.S.
I.C.
WAB. I.T.S.
STARNES
C.P.ST.L.
PEORIA & NORTHERN
YARDS
NORTH
GRAND
AVE.
B.&O.
ST.
EAST GRAND AVE
FRT STA.
I.T.S.
I.C.
WAB.
RAILROAD
WASHINGTON
ST.
U STA.
COOK
ST.
SOUTH
GRAND
AVE.
TANSY
C.I.&W.
B.&O.
WALNUT
SIXTH
ELEVENTH
EIGHTEENTH
ASH
ST.
ILES
I.C.
WAB.
C.P.ST.L.
C.A.
I.T.S.
BUNN PARK
WAB. C.P.&ST.L.
WAB. C.P.ST.L. C.A. I.T.S.
TO ST LOUIS
C.A.
I.T.S.
C.A.
I.C.
American Map Building
Chicago Illinois

CHART 17

Operating expense of tower capitalized	$120,000
6 trains a day @ $5.00 per train mile capitalized	700,000
	$820,000
Saving in line change	$117,980
Net saving in favor of proposed plan as against alternate plan	$702,020

4.3 miles of line abandoned.
4.5 miles of new line.
3.25 miles extra distance.

C. I. & W. Cut-Off

PROPOSED PLAN

From Sugar Creek to Tansey Along Grand Avenue East:

Excavation @ 40¢	$ 5,300
Pipe culvert	500
6,000 ft. track taken up and relaid	3,600
Ballast	4,500
Signal apparatus	2,500
Right-of-way	7,000
	$ 23,400
15% overhead and contingencies	3,500
	$ 26,900

4.25 miles of line abandoned.
3.1 miles saving in trackage.

Alternate C. I. & W. Cut-Off

From Keyes to Sugar Creek on B. & O.:

Excavation @ 40¢	$ 33,758
5,000 ft.track taken up and relaid	3,000
Ballast	3,750
Signal apparatus	6,000
Right-of-way	5,000
	$ 51,508
15% overhead and contingencies	7,722
	$ 59,230
Extra tower to be maintained—$6,000 a year	$120,000

5.5 miles abandoned.

NOTE: This shows a great increased cost over the proposed plan and also gives a prohibitive grade.

Second Track—C. P. & St. L.

TO ACCOMMODATE CHICAGO & ALTON

Ridgely to E. Grand Avenue and Elevation of Approach to Washington St.:

Length—10,500 feet.	
9,000 ft. second track with relaid track and new ballast. .	$ 15,350
Embankment	8,750
Ballast	5,000
Track taken up and relaid	2,000
Special track work, crossings, etc	1,500
Rearrangement of signal tower	5,000
	$ 37,600
15% overhead and contingencies	5,640
	$ 43,240

Peoria & Northern Approach

For Switching Only—Elevation of Approach to East Grand Avenue:

Embankment @ 50¢	$ 3,500
1,500 ft. track taken up and relaid	750
Ballast	1,000
	$ 5,250
15% overhead and contingencies	790
	$ 6,040
I. T. S. elevation to approach at Washington Street same as above and change to trolley	$ 8,500

Illinois Central Second Track

From Starnes With Approach and Elevation to Washington Street to Accommodate Wabash:

Relaid track and new ballast.	
74,398 yds. embankment @ 50¢	$ 37,200
13,900 ft. track taken up and relaid @ 60¢	8,340
13,900 ft. track ballasted @ 80¢	11,120
Special track work and changes to Starnes tower	3,000
	$ 59,660
15% overhead and contingencies	8,950
	$ 68,610

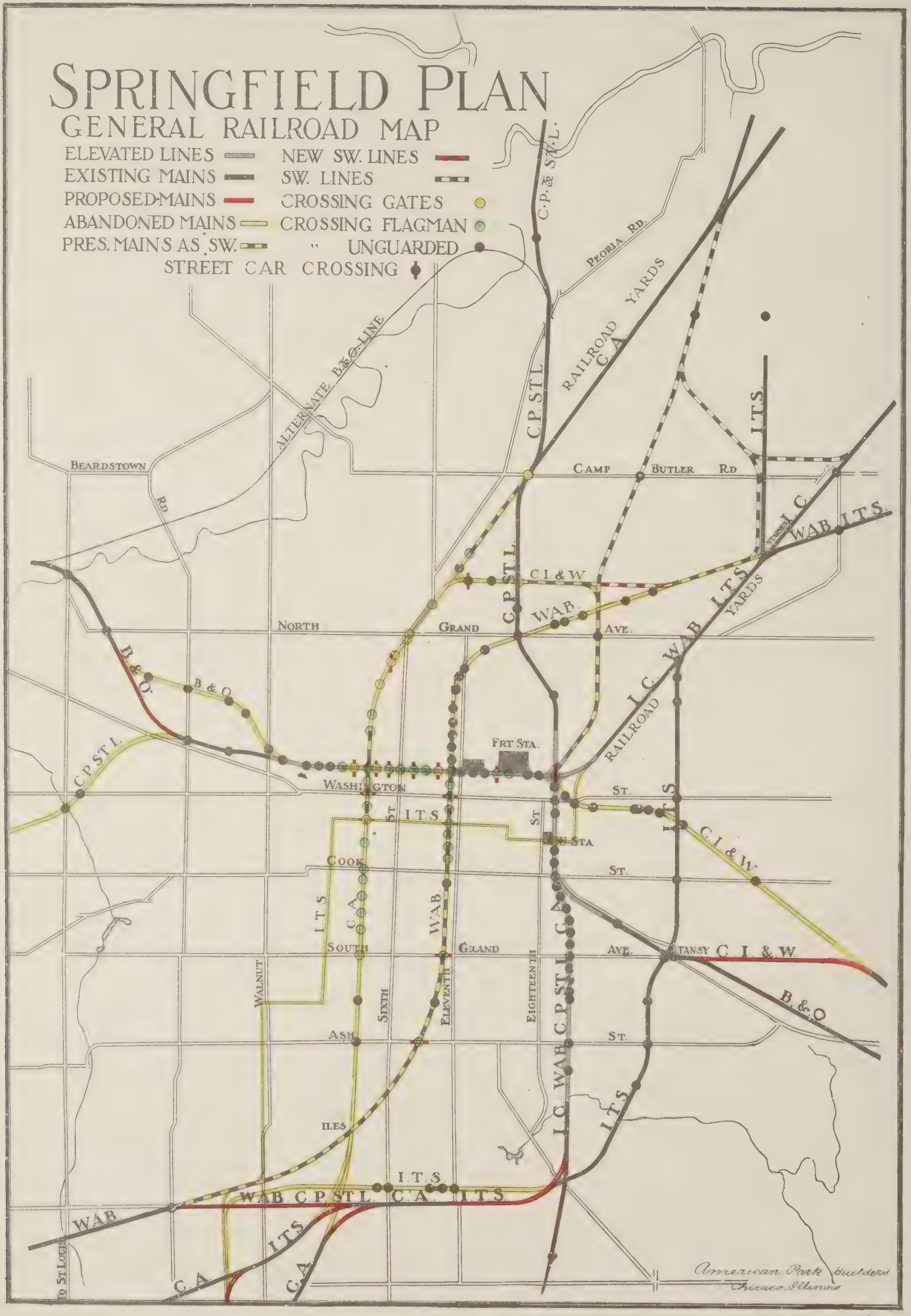

SPRINGFIELD PLAN
GENERAL RAILROAD MAP
ELEVATED LINES
EXISTING MAINS
PROPOSED MAINS
ABANDONED MAINS
PRES. MAINS AS SW.
NEW SW. LINES
SW. LINES
CROSSING GATES
CROSSING FLAGMAN
" UNGUARDED
STREET CAR CROSSING
C.P. & S.W.L.
PEORIA RD.
RAILROAD YARDS
C.A.
ALTERNATE B.&O. LINE
C.P.ST.L.
I.T.S.
BEARDSTOWN RD
CAMP BUTLER RD
I.C.
WAB.
I.T.S.
C.I.&W.
NORTH GRAND AVE.
B.&O.
FRT STA.
WASHINGTON ST.
COOK ST.
SOUTH GRAND AVE.
TANSY
WALNUT
SIXTH
ELEVENTH
EIGHTEENTH
ASH ST.
ILES
C.A.
TO ST LOUIS
American Park Builders
Chicago, Illinois

CHART 18

Main Group

Washington to Cook Street—Four tracks not including station layout or new right-of-way; new track and ties for two tracks, others relaid.

Section 2,400 feet long.

Embankment @ 50¢	$ 53,260
4,800 ft. new track	14,480
4,800 ft. track taken up and relaid @ 60¢	2,880
9,600 ft. track ballasted @ 80¢	7,680
3—four track subways—60-ft. opening, Washington, Jackson and Cook Streets	135,000
Tower at Cook Street	6,000
Pavement and sidewalk taken up and relaid	15,000
	$234,300
15% overhead and contingencies	36,200
	$270,500

Illinois Central

Cook Street to Bunn Park Junction—1,100 ft. North of I. T. S. Crossing:

Three track system—one track taken up and relaid, two new tracks.

Length of section 9,300 feet.

Embankment @ 50¢	$113,460
9,300 ft. track taken up and relaid @ 60¢	5,580
18,000 ft. new track	57,660
27,900 ft. ballasted @ 80¢	22,320
5 subways, Clay, S. Grand, Laurel, Ash and a new street near park, three tracks @ $38,500	192,500
Tower at junction	6,000
	$397,520
15% overhead and contingencies	59,630
	$457,150

Chicago & Alton to Wabash Line—Single Track

6,600 ft. track relaid @ 60¢	$ 3,960
Ballasted @ 80¢	5,280
Grading @ 40¢	9,400
Telegraph	2,000
Right-of-way	7,500
	$ 28,140
15% overhead and contingencies	4,200
	$ 32,340

Double Track Cut-Off From I. C. to C. & A.

12,000 ft. track taken up and relaid @ 60¢	$ 7,200
17,500 ft. track ballasted @ 80¢	14,000
Grading—average 4-ft. high @ 40¢	23,760
Tower and signal work	10,000
Overhead bridge at southeast corner of Bunn Park	20,000
	$ 74,960
15% overhead and contingencies	11,240
	$ 86,200

I. T. S. Cut-Off

12,000 ft. track relaid and ballasted @ $1.40	$ 16,800
Grading	12,000
Trolley, 25,200 ft. double @ $5,000 a mile	50,000
	$ 78,800
15% overhead and contingencies	11,800
	$ 90,600

Recapitulation

Baltimore & Ohio		
East of Cook Street	$ 30,550	
Washington to Walnut Street	345,100	
New line	56,650	
		$432,300
C. I. & W. Cut-off		26,900
Chicago & Alton		
Ridgely to E. Grand Avenue	$ 43,240	
Peoria & Northern	6,040	
Cut-off from Bunn Park to C. & A	86,200	
		135,480
Wabash & Illinois Central		
Starnes to East Grand Avenue	$ 68,610	
Cut-off, C. & A. to Wabash	32,340	
		100,950
Illinois Central		
Washington to Cook Streets	$270,500	
Cook Street to Bunn Park Junction	457,150	
		727,650
I. T. S.		
East of Washington Street	$ 8,500	
Trolley and cut-off	90,600	
		99,100
Total		$1,522,380

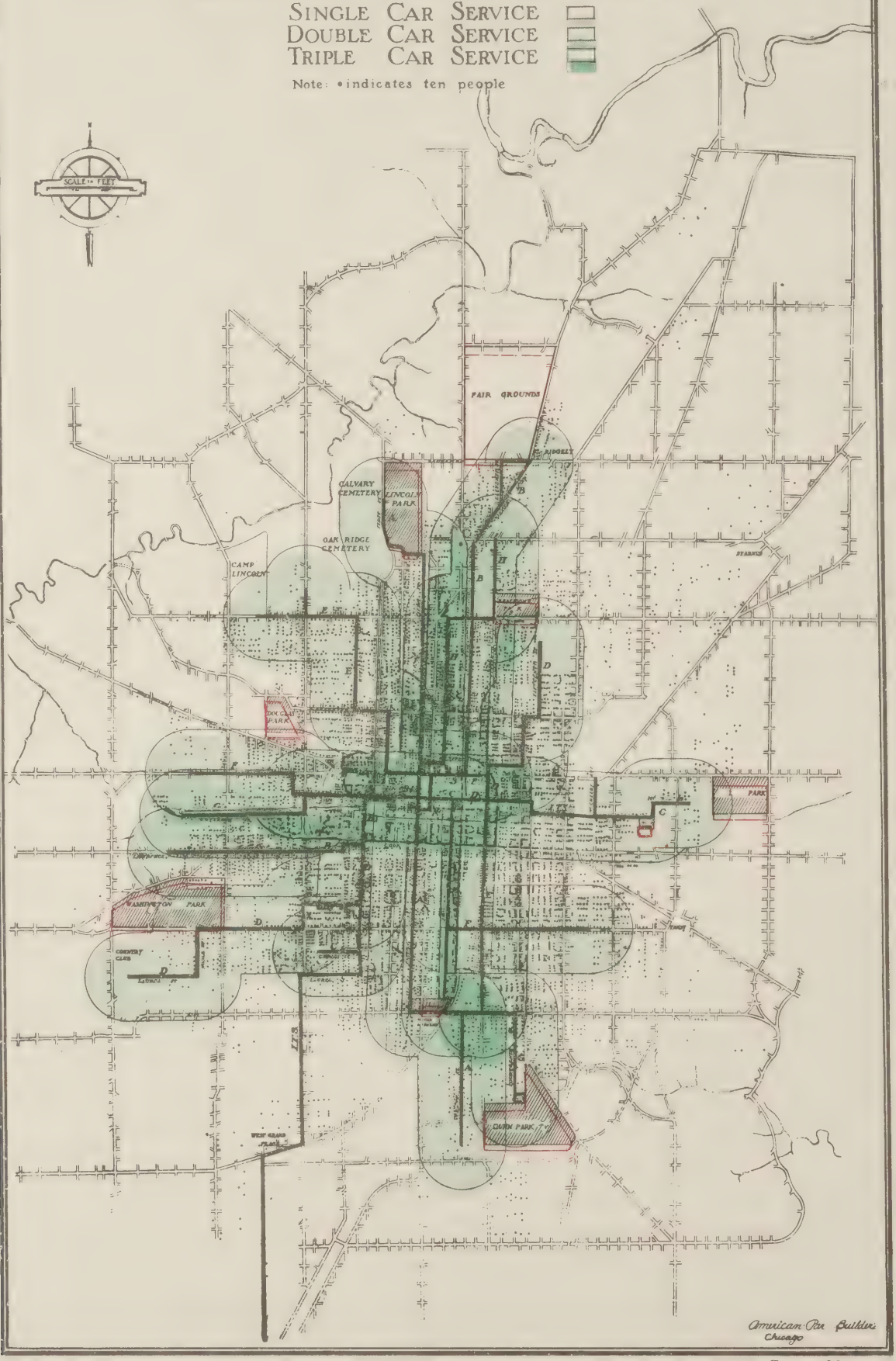
If all new track material were used, add $271,000 less value of salvaged material.

THE SPRINGFIELD PLAN

EXISTING STREET RAILWAYS.

SINGLE CAR SERVICE
DOUBLE CAR SERVICE
TRIPLE CAR SERVICE

Note: •indicates ten people



American Par Builder
Chicago

CHART 23

STREET CARS

THERE is a fundamental relationship between transportation facilities and the prosperity of a city; prosperity not only in the sense of increased population and industrial output, but measured in terms of better citizenship. This is true especially of street car transportation.

Perhaps no other feature contributes so much to the possibilities of satisfactory home sections as a properly arranged and operated street car system. No other form of transportation has as yet taken its place, and it is impossible to conceive of cities spreading out, taking on population and functioning properly without some sort of public conveyance insuring rapid transit, operating at regular and frequent schedules on, above, or below city streets.

As cities grow larger the importance of such transportation increases rapidly and must be given careful consideration in any plan providing for city development. It is to the best interests of any city, especially one located on comparatively flat land, to spread out fairly equally in all directions and to grow laterally rather than vertically.

The greater the number of people living in their own homes, in houses surrounded by goodly sized yards which permit air circulation, sunlight, the raising of flowers and vegetables and the furnishing of play room for children, the better influence will be brought to bear in building up a higher class of citizenship.

That city is fortunate, also, which can boast of uniform and comparatively low real estate values. Such a city is sure to attract newcomers and to be the home of better satisfied tax payers. Where transportation lines are inadequately and improperly placed and are not extended to keep pace with the growth of the city, development becomes spotted and erratic and uncommonly high values are forced upon property served by the street car lines, while sections of the city unserved are apt to suffer accordingly.

High prices in the residence districts result in tenements and apartments, while, conversely, unusually low prices in other sections are apt to result in shacks and hovels. For this reason street car lines should be spaced at regular intervals and should be operated on such schedules as will enable city dwellers to reach the chief objective points of the city, such as the manufacturing and commercial districts, and the railroad passenger stations, quickly and conveniently.

Further than this, it is necessary to the city's welfare that lines be extended fast enough to keep pace with the city's growth and preferably to keep well ahead of this growth, so as to encourage the building of homes well beyond congestion. While it is true that congestion spells profits for car companies under ordinary methods of track location, it is unquestionably true that better returns can be secured by serving the entire community equally and well, and by so doing increase the car riding habit.

The disposition of city councils to arrange the extension of car lines by franchise from time to time without a comprehensive scheme in many cases has been productive of baneful results. Not only is an unbalanced arrangement of car lines brought about, but lines are placed upon streets entirely unfitted by reason of lack of width or improper direction to insure the most successful operation of cars.

Present Conditions:

In the study of the local situation in Springfield other factors are seen contributing to a rather unsatisfactory situation. Originally two companies operated car lines and in view of the natural competition tracks were laid in close proximity, paralleling each other in the more densely populated sections. Upon the consolidation of these companies the lines were combined in operation under the terms of the franchises.

Unquestionably, the operating revenue has been insufficient to insure either a satisfactory schedule on these lines or their logical extension into the newer sections of the city. It has been demonstrated that car lines placed at a maximum distance of fifteen hundred feet from homes adequately serve the territory in which they are located and will establish and maintain a paying car ride per capita.

The street car system of Springfield at present comprises 27.7 miles of line and 9.9 miles of second track. The location of these lines in relation to the present population is shown on Chart No. 23. It will be seen that in several instances the zones of influence overlap while in certain sections of the city inadequate or no service at all is furnished.

The present use of street cars is at the rate of two hundred and seven revenue passengers per capita per annum. While the local company has been able to pay a fair return, due to economical operation, little praise can be given in connection with the condition of tracks, the rolling stock or operating schedule.

The interurban line of the I. T. S. system crosses the city using the tracks of the local company. These larger cars materially add to the congestion of the downtown streets. It is possible to route the I. T. S. line through the union passenger station, around to the southeast of the city in conjunction with the railroad group, bringing Springfield's local trains for the time being into the present station at Monroe Street.

Recommendations:

Chart No. 24 shows a comprehensive system of street car lines for the entire district of greater Springfield, utilizing as far as possible existing lines, removing superfluous lines, and extending into the outlying sections at fairly regular intervals. In all cases proposed lines are placed on main thoroughfares which are recommended to be widened sufficiently to accommodate double tracks and to provide in addition sufficient room for parked and moving vehicles. The system as shown constitutes 71.2 miles. This will necessitate 45.9 miles of new line and 20 miles of second track, of which 11.3 would be new, or a total of 57.2 miles of new track.

While the plotted district of greater Springfield is planned to accommodate 200,000 people at an average of twelve to the acre, long before this entire area is built up many sections of the city, especially apartment house districts, will have far greater population density. The car line routes have been designed with this in view.

The following table shows comparisons between the present and proposed system, the last column being based upon a population of 200,000, which apparently will be reached by the time the complete layout recommended is needed.

	Present System	Proposed System
Population per mile of line	2,140	2,800
Population per mile of track	1,570	2,190
Passengers per mile of line a year	428,000	840,000
Passengers per car mile	5.13	6
Investment	$3,000,000	$8,250,000
Miles of track per square mile plotted	3.6	2.5
Miles of track per square mile plotted excluding park and forest preserve areas		3.0

The proposed investment would be divided in about the ratio of 66⅔% for way and structures and 33⅓% for equipment. It is estimated that with a five cent fare, based on the present cost of labor, supplies and power, there would be a net return of approximately seven percent. This is based upon three hundred rides per capita per annum at an estimated population of two hundred thousand. It is quite probable that the point of three hundred rides per capita would be reached before all the lines shown would be required.*

The immediate abandonment of lines on N. Seventh and Eleventh Streets is recommended, also on S. Eighth, W. Governor and Cedar Streets. These lines show considerable duplication of service.

We recommend the extension of Carpenter Street line to N. Grand Avenue and thence to Starnes; the extension of a line to Mildred; the extension of S. Grand Avenue line to Tansey, and the Capitol Avenue line to Bergen Park, with possibly a line on Eighth Street from Black Avenue to the Fair Grounds and the operation of cars on the I. T. S. line to W. Grand Place.

With the abandonment of lines and with extensions as described above, sections of the city now isolated will be served, approximately one and one-fourth miles of line will be saved and without doubt a larger number of rides per capita will be secured than is true now on the lines affected.

With these changes, which will entail comparatively little expense, the transportation needs of the city will probably be taken care of for at least ten years, at which time the larger program can be undertaken and carried out by logical steps.

Proposed Routing of Car Lines

Following is a description of routes proposed for Greater Springfield, showing transfers to principal objective points in the city. (See Chart No. 24.)

Line "A"

Commence at Ash and Lincoln Streets, Ash to Noble, to S. Grand, to Lincoln, to and across Spring Creek, along new Cross Street and N. Eighth Street.

Downtown—transfers on G, H, C, K, L.

Union Station—transfers on C. G. H.

Factory District—transfers on B, H, M.

*NOTE: In 1920 Chicago street car and elevated systems combined, having a much longer haul, had 6.54 passengers per car mile and 360.9 rides per capita.

Line "B"

East and west cross line on N. Grand Avenue.
Downtown—N, K, L, P, J, E, H.
Union Station—D, H.
Factory District—Direct and E, J, D, F.

Line "C"

Begins on W. Washington Street to Glenwood, south to Monroe, to Eighteenth, to Jackson, to Twentieth Street, to Capitol, past Matheny Park to Monroe, to Livingstone, to Clear Lake Road, east to end.
Downtown—Direct.
Union Station—Direct.
Factory District—D, E, F, H, J.

Line "D"

Originates on new streets, two branches, southeast of Bunn Park to Eighteenth Street, to Washington, to Seventeenth, to Carpenter and new street to Ohio Street, to new streets in factory district.
Downtown—N, C, G, H, J, E.
Union Station—Direct.
Factory District—Direct or B, H, J, M, E.

Line "E"

Begins at present Bunn Park line on Fourteenth Street, to Ash, to Eleventh, to Jefferson, to Fourteenth, to Carpenter, to Fifteenth, to Sangamon Avenue, to new street along Chicago & Alton.
Downtown—Direct, H, G, P, L, N, C.
Union Station—C, G, H, D.
Factory District—Direct, B, J, M, D, H.

Line "F"

North and south cross line east side of Bergen Park, north from S. Grand Avenue.
Downtown—N, C, H, J.
Union Station—C, H.
Factory District—Direct, H, B, J, M.

Line "G"

Originates west of south end of Country Club to present Country Club line at Laurel, to Noble, to S. Grand, to Walnut, to Allen, to Spring Street, to Monroe, to Eighteenth, to Jefferson, to Eleventh, to Washington, to Second, to Carpenter, to Rutledge, to Miller, to Lincoln, to Beardstown Road, thence northwest.
Downtown—Direct.
Union Station—Direct.
Factory District—H, D, J, E.

THE SPRINGFIELD PLAN

PROPOSED STREET RAILWAYS.

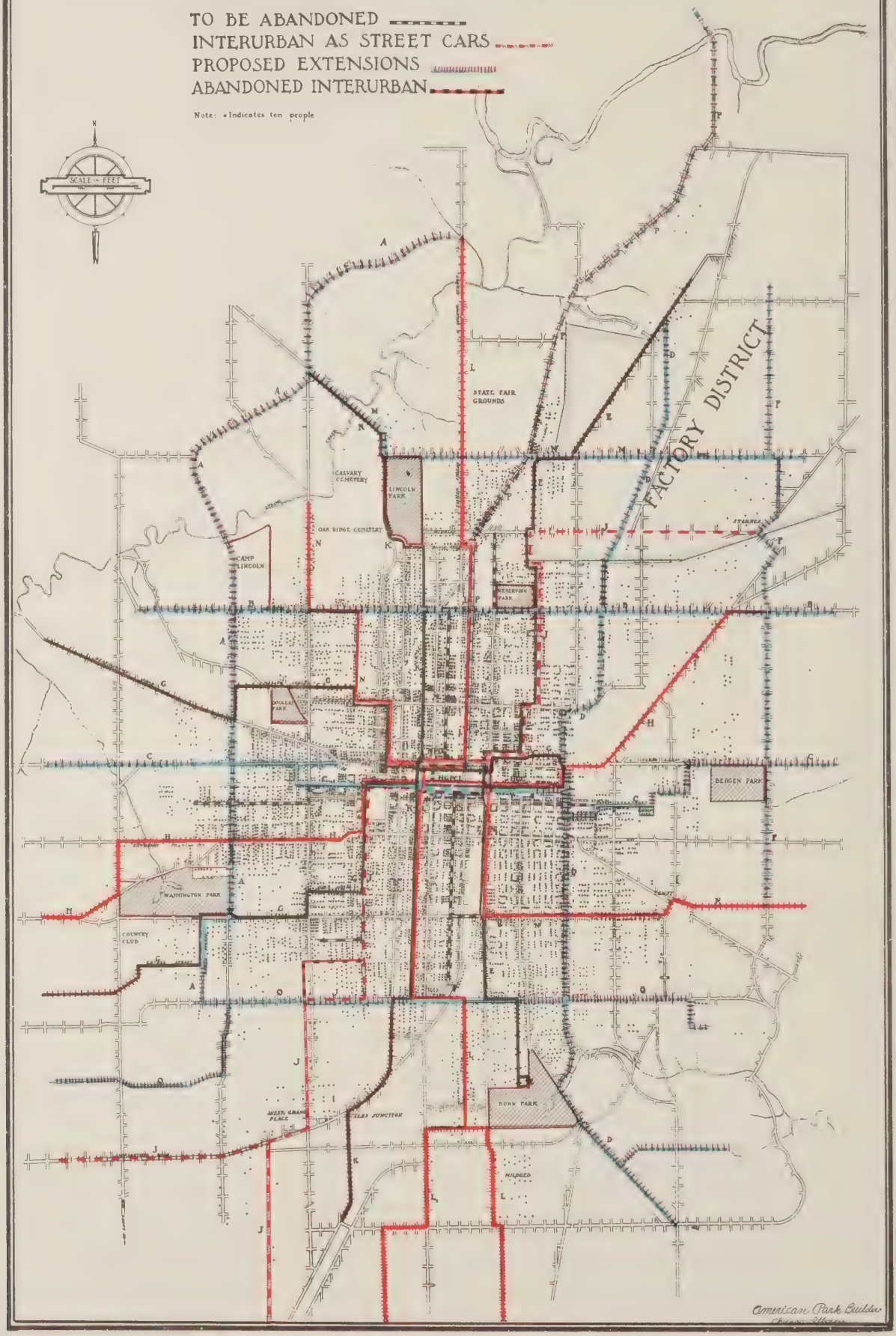


CHART 24

Line "H"

Begins on W. South Grand to diagonal, to Washington Park, north to Lawrence, to Cook and Spring to Monroe, to Eighteenth, to Clear Lake Road, to new street along Illinois Central to North Grand Avenue.

Downtown—Direct.
Union Station—Direct.
Factory District—Direct, D, E, B, J, F.

Line "J"

Beginning in two branches, one on Jacksonville Road and one on St. Louis line of I. T. S. to Ash, to Spring, to Monroe, to Eleventh, to Jefferson, to Fourteenth, to Carpenter, to Fifteenth, to Ridgely Avenue to Starnes.

Downtown—Direct.
Union Station—C, G, H, D.
Factory District—Direct, H, B, D, E.

Line "K"

Begins on new street at Chicago & Alton Railroad, south of Iles, to Jacksonville Road, to Third Street, to Ash, to Fifth, to Black Avenue, to Second Street, north and northwest to Line "A".

Downtown—Direct.
Union Station—C, G, H.
Factory District—B, H, J, M.

Line "L"

Begins in two branches in Mildred and west to Sanford Avenue and Tenth Street to Ash, to Fifth, to Washington, to Ninth, to Black Avenue, to Eighth across Spring Creek to Line "A".

Downtown—Direct.
Union Station—C, G, H.
Factory District—H, J, B, M.

Line "M"

Cross line on Sangamon Avenue from Line "A" to Line "F".
Downtown—K, L, P, E.
Union Station—D.
Factory District—Direct, E, D, F.

Line "N"

Begin on E. South Grand Avenue to Eleventh, to Washington, to Second, to Carpenter, to Rutledge, to N. Grand Avenue, to Walnut Street to Spring Creek.

Downtown—Direct.
Union Station—C, D, G, H.
Factory District—D, E, F, H, J, B.

Line "O"

Begin on road one-half mile north of Jacksonville Road to Lincoln Street, to Ash, to brickyard south of Tansey.

Downtown—J, K, L, E.

Union Station—D.

Factory District—D, J, E.

Line "P"

Begins at new city park at Sangamon River. Peoria Road to Ninth Street, to Washington, to Fifth, to Monroe, to Eleventh, to Washington, to Ninth.

Downtown—Direct.

Union Station—C, G, H.

Factory District—B, M, E, J, H.

THE PARKING OF SPRINGFIELD

PARKING, as exemplified by better forms of landscape embellishment, has always accompanied the best in city progress, and has shown in a most conclusive manner the character of the city as pertaining to culture, refinement, and desire for better things. There are few things which advertise a city so well and so widely as artistically arranged areas of land, strategically placed, where they may be seen by visitors and be used and enjoyed by city dwellers.

The delight of European cities today lies in the parks and public grounds with their flowers, statuary, and fountains. In fact, their renown has been built up very largely by reason of the impression taken away by visitors who have many times restricted their inspection to these parks and public building groups. Paris, with her unparalleled parks and boulevards, has achieved renown such as to bring direct and tremendous returns in the way of tourist trade. The same may be said of other centers like Venice, Vienna, Rome or Florence.

In a lesser degree, American cities have built up reputations through the attention they have paid to this branch of city building. The parks of Hartford, Connecticut, Minneapolis, Kansas City, Harrisburg and Chicago have made these cities outstanding and have resulted in direct and large financial benefits, indeed far outweighing the actual cost of these improvements.

Parks stimulate a pride of city, without which there can be little real civic patriotism. So manifold are the benefits of parks that no city plan would be complete without their fullest consideration. Provision for open spaces for recreation is necessary to offset the artificial environment of city existence. This has been demonstrated repeatedly in health surveys and in the selection of young men for military service.

The influence which parks exert in creating and establishing land values and in furnishing those amenities so necessary in urban life must go without challenge.

As in all other factors in city building, not strictly connected with the bare necessities of work and existence, parks in American cities have suffered in attention during the formative period of this country and of its sporadic cities.

During the last twenty years there has been a marked change in the consideration of adequate parking. Parks, together with art museums, better schools, churches, civic centers, water front improvement and better architecture, have marked a new order of things, an outgrowth of higher education, a broader outlook on life and the desire for those things which make life in cities worth while.

Originally, parks were considered merely for their beauty, to be looked upon only as out-of-door pictures with trees, shrubs, flowers, water and landscape used as pigments. The necessity for open spaces in congested centers of population later changed this conception and for a while the pendulum swung as far to the side of utility. The era that marked the development of the playground idea was largely devoid of artistic consideration.

Today we can safely say that the generally accepted standard in park design is a happy combination of these two ideas. The American city park as it is being planned today for the most part follows the accepted rules of art as pertaining to balance, proportion, mass, symmetry and color. Thus it becomes a picture in the truest sense of the word,

or rather a co-ordinated series of pictures, both as viewed from the outside looking into the park, and from many points of vantage in the interior. The grading of surfaces, the location of lakes and other water-ways, the curving of drives, the arrangement and location of planting masses and the development and framing of meadows, each to satisfy modern demands of landscape art, are carefully studied with respect to the same rules that apply in architecture, painting, or sculpture.

On the other hand, good work in park design demands that areas shall provide the fullest in human use. They are, after all, in the strictest sense, playgrounds. Waterways are used for boating, skating and bathing; lawns are graded and arranged for tennis, roque or baseball; woodlands are used for picnicking; swimming pools are built, and gymnasium apparatus is installed.

Beautiful natural terrain near Springfield

No institution of our cities is more democratic in its use than the typical American city park. To supplement the medium sized neighborhood parks, often great areas of forest, stream and woodland are taken over by the municipality for camping, golf and general recreation. By reason of these forest preserves, the once accepted standard of one hundred people to the park acre no longer proves adequate.

The movement which resulted in the building of playgrounds in nearly every large city is being modified by enlarging school grounds and thereby furnishing not only ample space for child play during the school season, but for both children and adults during the entire year. Modern school houses are designed with assembly halls fitted with a stage and dressing rooms where community activities such as banquets, concerts, amateur theatricals and public addresses may be held. By the use of larger school sites room is given for the extension of the buildings as needed from time to time to accommodate increased population, and there is provided opportunity to give an adequate setting to the school building.

The park units of the city should form a system rather than a series of detached unrelated areas. They should be located in such positions that each will conveniently serve its own district. Each park should be arranged to furnish the ordinary requisites for community use and should be not over one-half mile from the farthest home in its zone of influence. Special features, such as swimming pools, fields provided with bleachers for baseball and football, and the like, may serve larger districts, while picnic groves, golf courses and camping sites may be less frequent and made to serve still larger zones.

The Park Situation In Springfield:

Springfield is well supplied with medium sized park units. Altogether, the city possesses approximately one thousand acres of park land, practically all of which is developed. These park areas are also well distributed, each serving definite sections of the city. The parks of Springfield, however, are not connected by parkways or boulevards and are not supplemented by playgrounds, forest preserves, or outlying scenic driveways, all of which are needed to perfect the park system for Greater Springfield.

Inasmuch as the parks of Springfield are all somewhat distant from the center of the city, there is a large area of congested territory which provides no facilities for play. In this central portion of the city there is practically no land free of buildings where play parks can be installed. It is, therefore, of even more importance that attention be given to enlarging the school grounds.

The table on the following page shows the school situation as to available play space.

Land to the southwest of the city lends itself to the development of Residential Parks

School and Location	Enrollment	Percentage of District Built Up	Present Total Area Sq. Ft.	Building Area Sq. Ft.	Percentage of Area Used By Building	Present Play Area Sq. Ft.	Percentage of Area Used for Play	Sq. Ft. of Play Space Per Child	Proposed Total Area Sq. Ft.	Proposed Play Area Sq. Ft.
Bunn—13th & Division..	291	75%	136,500	9,500	42%	57,500	63%	197	224,000	140,000
Butler — W. Grand & Laurel.....	160	10%	140,000	8,400	44%	61,250	66%	382	280,000	185,000
Junior High—W. Adams & College.....	553	....	124,000	20,000	....	.....	....	...	124,000	.....
Converse—8th north of Eastman.....	636	75%	104,150	15,300	25%	26,250	33%	41	131,250	43,000
Douglas—Mason & Reynolds east of Walnut...	393	60%	240,000	22,100	12%	29,600	62%	75	240,000	150,000
Dubois — Washington Street & Lincoln Ave...	439	50%	117,000	23,500	32%	38,000	50%	87	165,000	83,000
Enos—Elliott & Bond...	584	75%	185,000	20,900	60%	110,600	67%	190	246,000	165,000
Feitshans — 14th & Kansas.....	301	65%	100,500	15,600	64%	64,000	55%	213	100,500	55,000
Harvard Park — Yale Blvd. & Oberlin.....	326	20%	233,000	5,600	62%	45,000	77%	138	233,000	180,000
Hay Edwards — Lawrence & Pasfield.....	654	60%	150,000	27,000	36%	54,400	67%	83	336,000	225,000
Iles—15th & Laurel....	792	50%	91,800	22,100	53%	48,400	49%	61	91,800	45,000
Lawrence—2nd & Laurel.....	612	70%	108,800	14,400	58%	19,000	68%	104	190,200	130,000
Lincoln—12th & Capitol	667	80%	90,500	17,200	65%	59,200	63%	89	103,500	65,000
Matheny—22nd & Jackson.....	357	15%	64,000	9,600	47%	30,000	69%	84	160,000	110,000
McClernand — 6th & Enos.....	538	85%	109,000	15,300	56%	61,500	66%	114	151,300	100,000
Palmer—13th & Mason.	676	60%	103,100	18,000	65%	67,000	58%	99	103,100	60,000
Pryor — ½ mile east of Fair Grounds.....	149	5%	62,700	3,040	64%	40,000	75%	268	233,000	175,000
Ridgely — N. 8th & Percy.....	680	30%	168,300	13,800	48%	80,000	82%	117	336,600	275,000
Stuart — S. Grand between 6th & 7th.....	474	85%	105,600	10,600	52%	55,400	47%	117	105,600	50,000
High—Adams & Lewis..1868		....	228,000	68,800	....	.....	....	...	291,000	75,000
Wanless—Cincinnati Street.....	294	....	74,400	4,400	67%	50,000	76%	170	210,000	160,000
Highlands.....			49,400	5,900	10%	25,000	56%	...	98,800	55,000

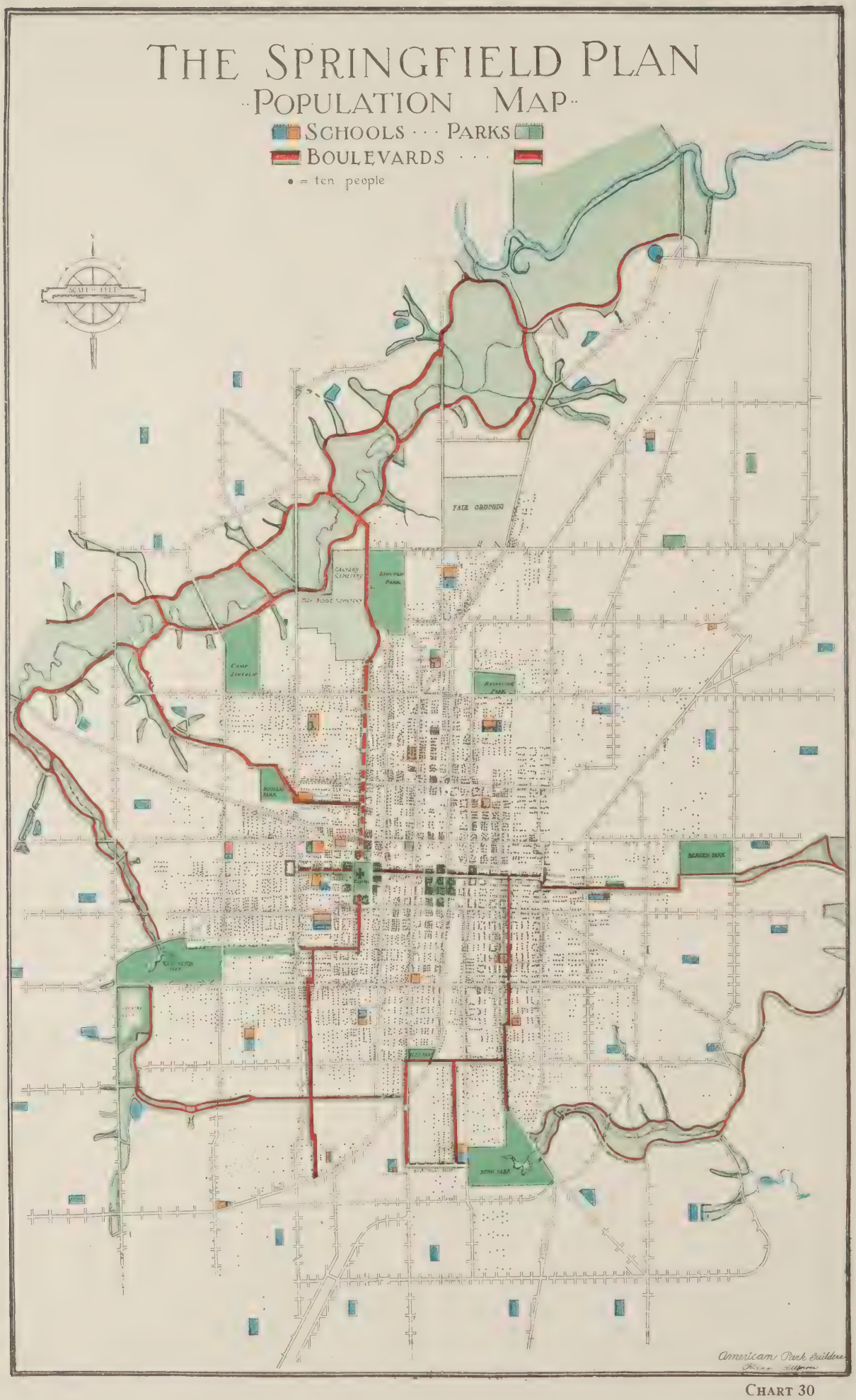

THE SPRINGFIELD PLAN
POPULATION MAP
SCHOOLS · · · PARKS
BOULEVARDS · · ·
• = ten people
FAIR GROUNDS
CALVARY CEMETERY
OLD RIDGE CEMETERY
LINCOLN PARK
CAMP LINCOLN
RECREATION PARK
DOUGLAS PARK
BERGEN PARK
BOND PARK
American Park Builders

CHART 30

SCHOOL RECOMMENDATIONS

(See Chart No. 7.)

Bunn School:

It is recommended that the remainder of the block on which this school is situated be acquired. Part of this area includes the end of Thirteenth Street which could be vacated. The size of the district, the enrollment and the percentage of the district built up would indicate that a larger building will be needed in the near future.

We recommend the taking over of a portion of the block shown on the plan, in all totaling approximately two-thirds of this block. The land to be taken on is free from improvements.

This is a new school, in a very sparsely built up section of the city, a section which, however, bids fair to become one of the better residential districts.

Converse:

It is recommended that the west line of the property be extended north to East Keyes Avenue and south to Eastman.

This is an old school with a recent addition. It serves a large district and has one of the largest enrollments of the entire school system. Whereas children at present can play on unused ground to the north, this is a dump and will probably in time be inaccessible. The table shows forty-one square feet of play space per child, and the enlargement of the ground seems to be a pressing need.

Dubois:

It is recommended that the rest of the block to the south be taken as an addition to the grounds. This, in fact, will be none too large. The block on which the school is situated is small and it is estimated that the district is only fifty percent built up.

Enos:

We believe that the west line of the property should be continued south to West Calhoun Street. This would give an addition of six lots, on four of which a greenhouse is located. This will add 61,500 feet, or approximately thirty percent of the present area.

Hay Edwards:

This school at present has an exceptionally large enrollment. The building is old and probably will have to be replaced in the near future. The present area of play space as shown by the table gives but eighty-three square feet for each child.

A much larger population may be expected in this district and this, together with the need of a new and larger school building, shows need for enlargement of the grounds. The only opportunity seems to be in crossing Chenery Street and taking over the entire block to the south. Unfortunately, this block is entirely built up with small homes. By taking over this block, however, West Chenery Street could be closed, thereby giving a fairly adequate site for the school.

High School:

Whereas the High School has a well equipped athletic field south of Capitol Avenue and is therefore provided with adequate athletic facilities, we believe the ground should be extended west as far as Parker Avenue. This is the only direction in which the building could be extended satisfactorily and provision for such extension undoubtedly should be made. Extension of the ground south to Monroe Street would involve the taking over of expensive improvements, which, however, may be necessary in the future.

The High School athletic grounds ought to be provided with bleachers, dressing rooms, shower baths and toilet facilities. Aside from this the grounds should be made more attractive by means of planting.

Iles:

This site is obviously too small and the only feasible extension seems to be by crossing South Sixteenth Street and taking the one-half block to the east. This would be a makeshift arrangement, however, as it is unquestionably bad planning to place a playground for a grade school across a street. It is probable that a solution to this situation will be in installing a new school to supplement Iles, Feitshans, and Stuart, all of which are on small blocks.

Lawrence:

We recommend taking the rest of the block to the north, vacating East Spruce Street and extending the property to East Cedar Street.

A cluttered approach to a splendid school

Lincoln:

We recommend taking the rest of the block as far as South Eleventh Street, thereby adding 13,000 square feet.

This is a new school and will have added importance with the proposed development of Capitol Avenue. The surroundings of this school should not be injured by the narrow strip of private buildings on the ground proposed to be acquired.

Matheny:

This school is unquestionably built on a much too restricted area. Matheny Park directly to the north relieves the situation somewhat, but forces children to cross what may become an important thoroughfare and therefore introduces an element of danger, which should not be overlooked.

The right thing to do in this case unquestionably would be to take the rest of the block on which the school is situated. The frontage along Jackson Street, however, is built up and as an intermediate course it might be better to secure the south half of the block as shown.

McClernand:

We recommend extending the north line of this property to Fifth Street. This enlargement would necessitate the taking over of high priced property, but seems desirable in view of the fact that the plant occupies an important position in relation to the school system, is in a neighborhood where modern school facilities will be demanded and which is undoubtedly destined to increase greatly in population. This will necessitate the replacing of the old building with a modern structure of still larger dimensions.

Ridgely:

The Ridgely School grounds can be extended south to Griffiths Avenue. The school has a large attendance, but the district has about one-third its probable ultimate population. This school draws from a much larger district than its location would seem to warrant.

Ample ground should be provided around all schools for playgrounds and for building extensions

The school itself is cut off by the Alton Railroad, the Fair Grounds and Lincoln Park and unquestionably will have to be supplemented in the near future by another school farther to the north.

Stearns:

This school will have to be removed from its present location in case the factory district and classification yards are developed as proposed.

Wanless:

This school is in a new section of the city and the grounds while ample for present needs will have to be enlarged at no far remote date. The rest of the block should be secured.

School Sites In the New Plotting:

Suggested school sites are shown on the general plan in such locations as to serve districts of approximately one-quarter mile in radius. These in all cases occupy a full block and are placed at least one block distant from main thoroughfares. This is done to remove the schools from proximity to heavy traffic and street cars, and to preserve the more valuable frontage along these thoroughfares for other uses.

In the acceptance of subdivision plats hereafter, careful attention should be paid to these reservations for future schools. At such times the School Board should prepare to

take over the tracts designated and hold them vacant until such time as school buildings are needed. This will naturally result in a great saving of money, as compared with the usual practice of waiting until the land is built upon and then purchasing whatever sites happen to be available at the then greatly enhanced price. Not only does this policy result in paying far more for the property than would be true by using proper foresight, but it results many times in placing schools on lots which are entirely too small for the purpose.

A PARK AND BOULEVARD SYSTEM FOR GREATER SPRINGFIELD

CHART No. 29 shows the present city of Springfield together with the enlarged area which will be involved in the city's extension according to the general plan, and in addition shows the suggested impounding lake and a proposed driveway to the site where once stood the hamlet of New Salem so intimately associated with Lincoln's early manhood.

New Salem is now reached by country roads which in most cases follow section lines. There is an opportunity to reach this point by two routes, each more direct than afforded at present, as well as more interesting.

These drives would be made to skirt along the bluffs and through the woodlands overlooking the Sangamon Valley, utilizing here and there stretches of present roadway and elsewhere following the routes laid out to the best advantage from the standpoint of grades and views. The proposed drive is shown on each side of the Sangamon, forming a loop comprising about forty miles as measured from the Court House at Springfield to New Salem and return.

Much of the scenery along this drive can hardly be surpassed in the middle west. Most of the way the drives would be carried through woodland, while constantly there would be open to view broad vistas over the bottom lands of the Sangamon, framed by the wooded hillsides and ravines beyond.

A scenic drive, such as described, could be built at little expense compared with such well known projects as the Columbia River Drive and that along the Palisades on the west side of the Hudson. No serious engineering problems would arise and the land required is comparatively inexpensive. Rarely is there an opportunity to build at so little cost a really magnificent driveway, reaching an objective of national significance.

The Valley of Spring Creek:

Spring Creek, flowing from the southwest to its confluence with the Sangamon, thrusts a deep valley across the entire northwest section of the city. The city sewers now empty into this creek making it extremely offensive. The valley is subject to frequent and severe floods and is in consequence naturally unsuitable for residences, factories, or any other department of city use. The valley is flanked by steep banks, to a large extent denuded of tree growth.

Should the industrial growth of the city extend to the northeast and into the proposed factory district, as it is likely to do, this valley of Spring Creek would acquire considerable importance. It would form a natural and very effective barrier between this factory district and what would serve as a desirable location for homes. The city must in any event sooner or later cross the valley.

If the valley should be retained by private ownership, there would be danger that it would be disposed of in cheap allotments resulting in a shack district having a depreciating effect on adjacent property, as well as subjecting people living in the valley to danger by floods.

By taking over the valley of Spring Creek as a municipal preserve, reforesting the area, carrying the sewage from the city through the valley in an intercepting sewer, and allowing the Creek to again flow in its original state, the conditions above mentioned, which may in time become a serious menace to the city's beauty and healthfulness, will be obviated.

While it is true that the fifteen hundred or more acres represented in such a preserve is not at this time needed by Springfield for park purposes, the day will come when such a

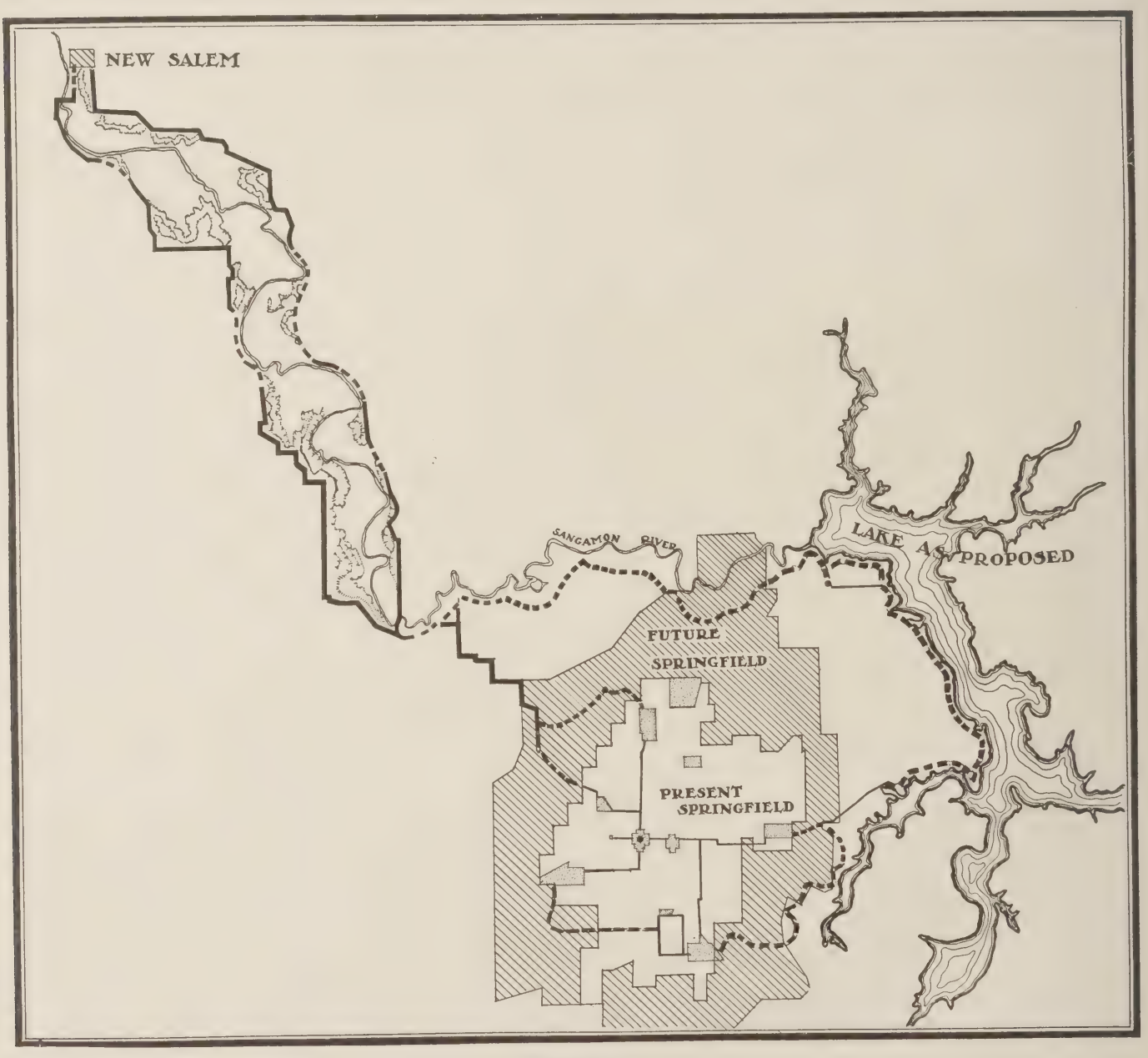


CHART 29
The Proposed Lake and Driveways to New Salem

great body of land, naturally beautiful and providing as it will great areas for golf, aeroplane landing fields, picnicking, and sports of all kinds, may be of inestimable value to the community.

Banks of the Proposed Lake:

The chart shows the flood line of the proposed lake for Springfield, previously alluded to in this report. This would follow the 530 contour and would cover approximately fifteen square miles. The lake would extend far around to the southeast of the city and into the South Fork and Sugar Creek Valleys.

On the city side of this proposed lake would be a range of bluffs, forming an excellent situation for a lakeside drive and a parking strip extending to the water's edge. Such a drive would start presumably somewhat to the northeast of Bunn Park and would connect with the proposed forest preserve at Peoria Road. Even without the lake such a route for an outlying parkway would be exceedingly interesting and would serve to furnish a connecting link in the proposed boulevards leading around the city. With the lake, however, such a driveway would be an exceedingly important part of the park system.

The Banks of the Sangamon

The one thing that Springfield needs most from the standpoint of recreation is a fine body of water, and while a lake along the Sangamon bottoms is needed most of all to encourage Springfield's growth and to insure the water supply necessary to a great city, not the least of the benefits it would provide would be those having to do with balancing Springfield's recreational facilities. Here would be formed a body of water large enough for the use of sail and motor boats, furnishing miles of excellent shore line for cottages, picnic and club grounds, besides furnishing a waterscape, which by all means should be made accessible by such a parkway as has been suggested.

A similar project has already been carried out at Decatur, only a few miles away, which has without doubt fulfilled the most sanguine expectancy in regards to its value to the community.

The mistake should not be made, however, of neglecting to secure for public use a goodly amount of the shore line. Once allowed to build up with cottages, such a shore will be difficult and expensive to secure, as is constantly being attested in so many cities.

Entrance to New Park
North of Sangamon River

The Proposed Encircling Boulevards:

Chart No. 29 shows a suggested parkway connecting the principal parks and entirely encircling the city. Starting from Bunn Park it would lead along the west shore of the proposed lake and thence up the valley of Spring Creek. This parkway would connect with the Fair Grounds and Lincoln Park, and a little farther to the southwest would extend through Camp Lincoln, and following up the little creek would reach Washington Park. From here it would extend south past the golf club and, swinging to the eastward, would traverse beautifully wooded land along creek bottoms, finally again reaching Bunn Park.

This would form a driveway of some twenty-five miles, leading through and making accessible the present parks of the city, as well as opening to view the finest scenery around.

Inner Boulevards:

Connecting the above described encircling parkway with the heart of the city would be a series of proposed parkways consisting of First Street, Capitol Avenue, Jackson Street, Fifteenth Street, Williams Boulevard and Lowell and Henrietta Streets. These would give access into the city from all directions and would provide fast traffic ways for pleasure vehicles.

In cases, such as Lowell Avenue, Williams Boulevard and Bryn Mawr Boulevard, ample width is provided. Other streets to be used in this parkway system should be widened. In the case of First Street, Capitol Avenue and the suggested connection of Williams Boulevard with the Capitol Group, this widening will take on considerable importance and will necessitate large expense.

Capitol Avenue, on account of the proposed union station site and forming as it will a main approach to the heart of the city, deserves particular attention. For a distance of five blocks from the Capitol, or to Seventh Street, the problem of widening this thoroughfare is serious. Expensive buildings occupy the ground to the property line and any widening project would necessitate the tearing down of at least the fronts of these buildings. Beyond Seventh Street the frontage is less valuable, and from this point to the union station at Eighteenth Street it is suggested that Capitol Avenue be widened to one hundred eighty feet. Most of the lots facing Capitol Avenue are one hundred fifty feet in depth. The removal of fifty feet on each side of the street would therefore shorten these lots to one hundred feet still providing depth enough for the character of buildings which will eventually seek such frontage, namely, high class apartments, hotels and shops.

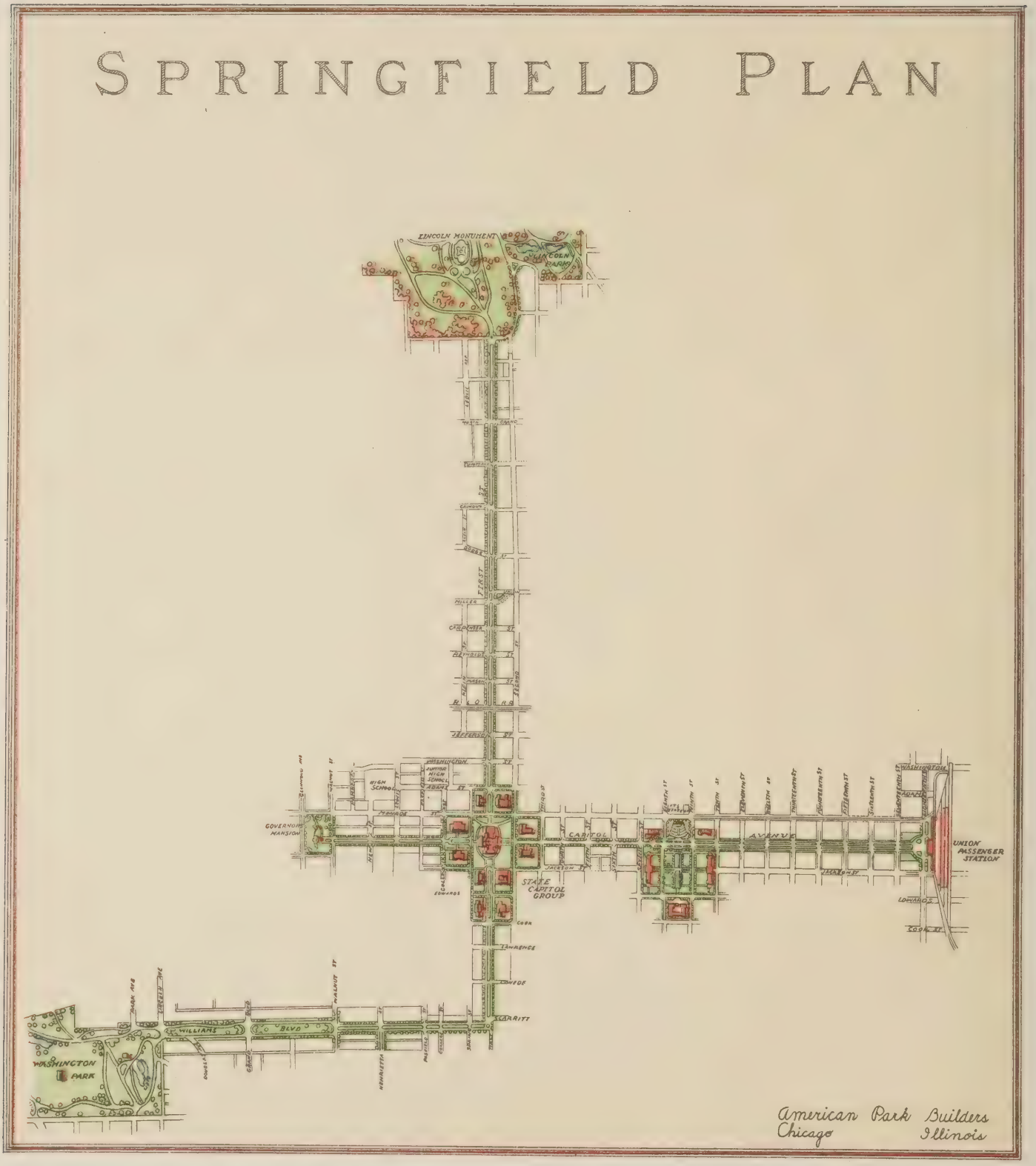
Under the proposed zoning ordinance these buildings would be allowed to use a large

percentage of the area of the lot. Widened to one hundred eighty feet there would be given an opportunity for three drives, the center driveway for fast pleasure traffic and the two side driveways for heavier traffic. In addition, there would be ample space for sidewalks, trees, and for two parking strips.

From Seventh Street to the Capitol it is suggested that Capitol Avenue be widened to one hundred twenty feet, removing twenty feet on each side.

First Street from Monroe to Oak Ridge Cemetery would by the plan be widened to one hundred thirty feet, making room for two side drives and a center parking. First Street at present deviates somewhat from a straight line and in order to be made into a dignified avenue would have to be straightened as is shown on Chart No. 13. This would utilize Monument Avenue and meet the present entrance to the cemetery.

Unfortunately, from the standpoint of architectural balance, the Lincoln Monument is not on the axis of this street. It is possible, however, that the entrance to the cemetery would be treated in some manner to furnish a sufficiently dignified terminus.



Plan showing proposed Municipal Group and Union Passenger Station with parkways connecting State Group, Lincoln Monument, Washington Park and the proposed site of the Governor's Mansion

THE STATE BUILDING GROUP

SPRINGFIELD has an opportunity to express by architectural splendor her rightful position as the capital of the State. To neglect this opportunity would not only show lack of proper city ideals on the part of Springfield's inhabitants, but would be an index to an unprogressive spirit on the part of the citizens of the great commonwealth.

If the Capitol is to remain in Springfield, and there seems neither inclination nor logical argument for its change, plans should be formulated without delay which when finally carried out will make the Capitol Group at Springfield an inspiring example of its kind.

From a utilitarian standpoint the Capitol Group itself should be spacious. The departments of government are constantly becoming more multiplex and demanding of more commodious quarters. The Capitol building has already long since become too small, and the new Supreme Court building and Centennial building show the tendency toward providing for enlarged quarters.

In time to come, other buildings will undoubtedly be needed to house the departments of agriculture, engineering, education and the state library. The first step is obviously to secure sufficient land around the present Capitol building to give ample sites and adequate settings for these buildings as they become needed. Only in this way can a harmonious and well balanced group be insured.

The usual practice of waiting until a certain building is needed, then purchasing a site for it alone has proved in too many instances inimical to the satisfactory development of a state or municipal group. The controversies and bickerings which so often accompany such purchases dwarf in perspective the real policy to be followed and are apt to result in the securing of tracts too small and in many cases of improper location to bring about the desired results.

The policy of securing ample grounds for the enlargement of the Capitol Group has received the well advised attention of Mr. Edgar Martin, State Architect, as well as that of several of his predecessors, and the Martin Plan, modified to fit into the larger scheme of the city plan, is earnestly recommended for adoption.

We believe that the present grounds around the Capitol should be enlarged to include the following: the remainder of the block on which the Supreme Court building is situated; the block to the north of the Supreme Court; the entire block west of First Street and north of Monroe Street; two and one-half blocks as shown on the plan lying between College and Spring Streets and south of Monroe; and two full blocks south of the Capitol grounds between Edwards and Cook Streets.

CHART 34—*Bird's-eye view of proposed Municipal Group*
Lincoln Monument, proposed site for Go

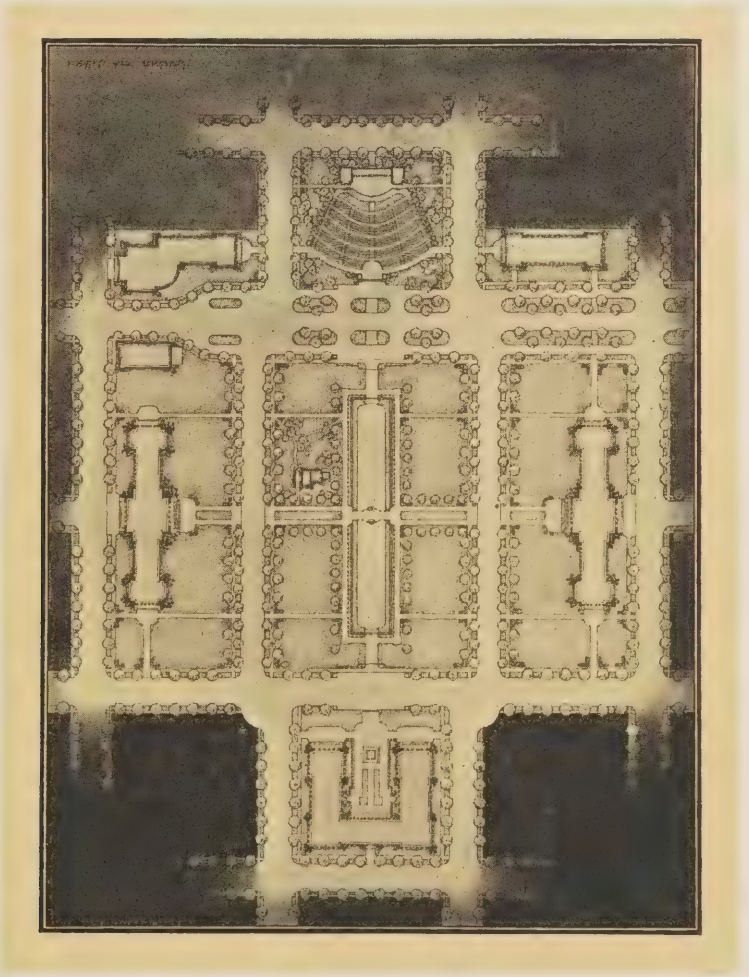
al Union Station with parkway connecting State Capitol,
nor's Mansion and Washington Park

THE MUNICIPAL BUILDING GROUP AND THE LINCOLN HOME

THE protection of the Lincoln Home against danger of fire, and the creation of a setting to this modest little cottage befitting its importance calls for drastic treatment.

It is not enough to purchase and clear away one or two houses, but a landscape creation should be conceived and carried out which will not only protect the little home which means so much to Springfield and to the entire country, but which will cause it to be a part of a composition truly imposing in character.

The plan calls for acquiring seven full blocks south of Capitol Avenue, together with one full block and two half blocks north of this thoroughfare and extending between Seventh and Tenth Streets. Fortunately, with a few exceptions, the land is occupied only by frame dwellings, and with the proposed removal of the Wabash Railroad there can be provided, with as little expense as would obtain almost anywhere else in the city, an area of sufficient size on which to erect around the Lincoln Home the municipal and semi-



Plan of the Proposed Municipal Group around the Lincoln Home

Study for Open Air Forum—Civic Center

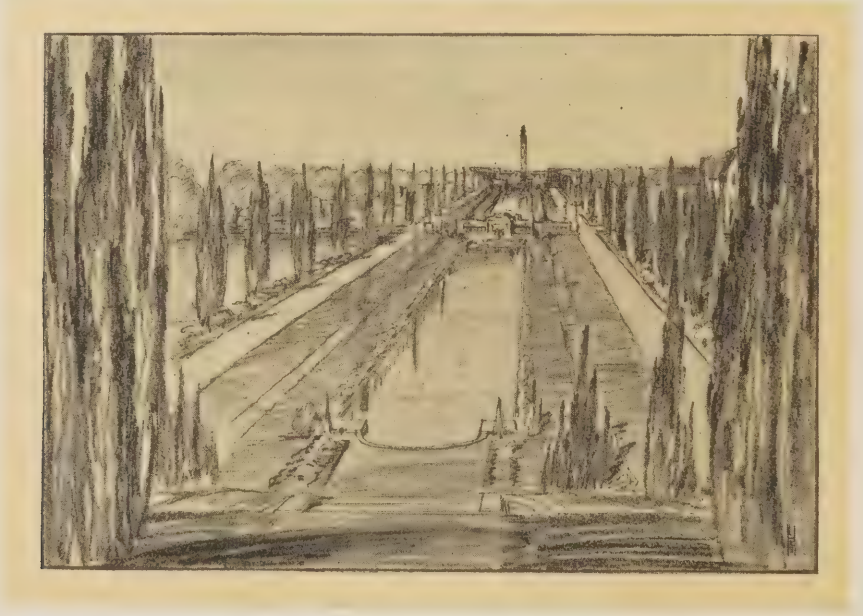
public buildings, other than those needed in the State Group, to form a magnificent and suitable civic center.

The detailed plan and perspective of this project show the proposed city hall dominating the scheme. This would be placed on the block bounded by Edwards, Cook, Eighth and Ninth Streets. It is suggested that this building be set off by a campanile and connected by a water panel with an open air forum occupying the block between Capitol and Monroe Streets.

The present library building could have room for extension in the half block to the east and would be balanced by a companion structure in the half block west of Ninth Street.

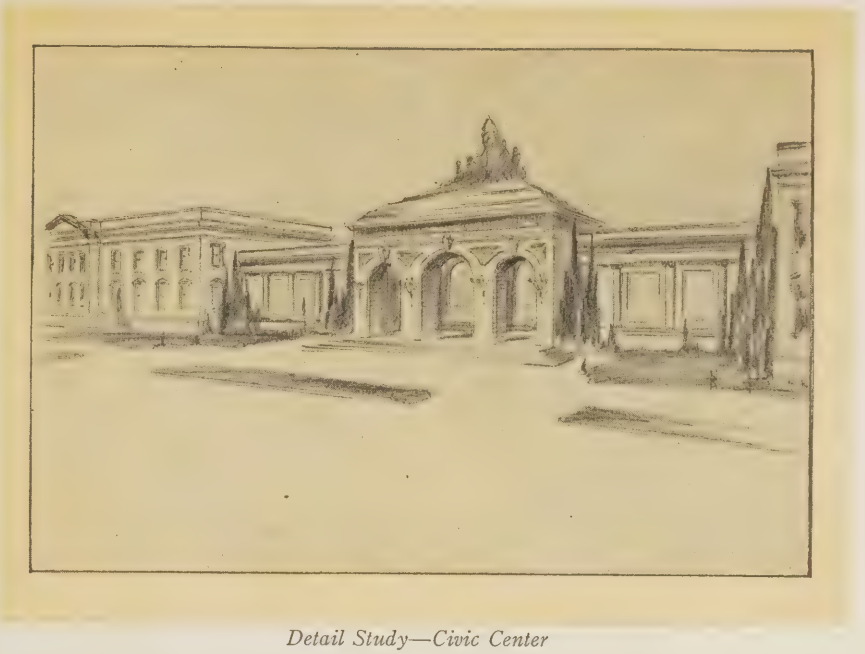
Eighth and Ninth Streets would be relocated in order to widen the center panel and to provide a better approach to the Lincoln Home.

By widening Capitol Avenue the civic center and the State Capitol Group would be tied with the union station. The effectiveness of this plan can hardly be visualized. The station would, in fact, become the very gateway to the city from which visitors to the business and hotel center would pass over an imposing parkway, past the civic group with



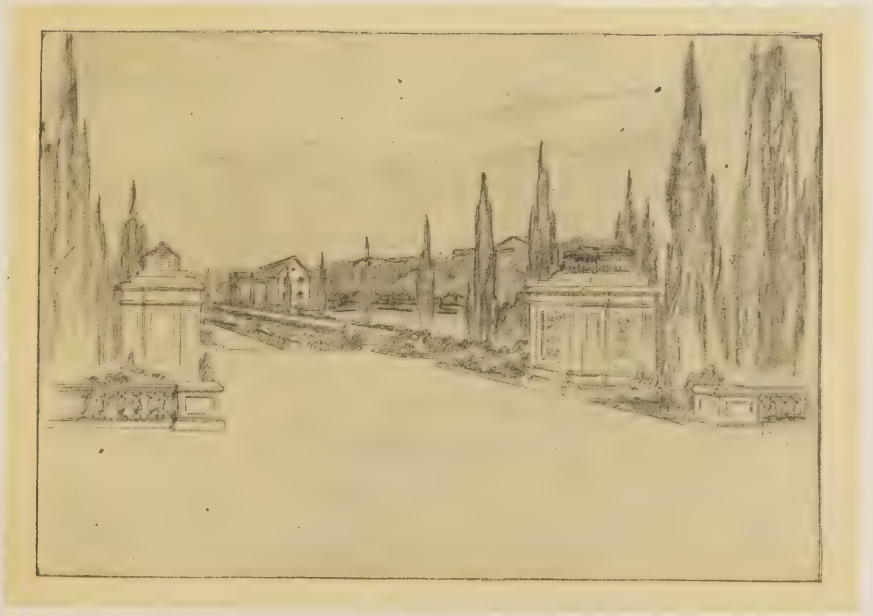
Study for Water Panel—Civic Center

the dome of the Capitol in the distance. Capitol Avenue would assume the character which should accompany such improvements and would unquestionably result in enhancing property values along its frontage, which would largely, if not quite, offset the cost of widening. Its connection through the Capitol Group to the proposed site of the Governor's mansion, to Washington Park and to the Lincoln Tomb over First Street would bring about an internal system of parkways of striking beauty, as well as of great value from a traffic standpoint in forming thoroughfares over which fast moving pleasure traffic could approach the center of the city.



Detail Study—Civic Center

The widening of First Street to the Lincoln Monument is in keeping with the prominence that should be given to all things in Springfield connected with the "Great Emancipator." It is entirely fitting, aside from bringing about an element of architectural balance to connect the Capitol Group by means of a beautiful avenue with the resting place of Lincoln.



Study for Plaza Entrance—Civic Center

IN CONCLUSION

IT has been a pleasure to work with the people of Springfield in the preparation of this program for the upbuilding of their city.

While all the projects set forth herein may never be realized, a great good will come if they are but given serious consideration by the stockholders of the Springfield corporation, for thereby a new conception may be had of the city's real purpose and possibilities.

It may be expected then that the plan will be used intelligently to check and guide the growth which must inevitably take place. If the plan is used in this way, it is safe to assume that many of the common mistakes in city building will be guarded against and that this urban machine will by gradual stages become more efficient and satisfactory as the years go by.

Respectfully submitted,

MYRON HOWARD WEST

UNIVERSITY OF ILLINOIS-URBANA
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